

Chapter 28: Section 4(f) Evaluation

28.1	Regulatory Setting	28-2
28.1.1	Identifying Section 4(f) Resources	28-3
28.1.2	Uses of Section 4(f) Resources	28-4
28.1.3	<i>De Minimis</i> Impacts	28-5
28.1.4	Avoidance and Minimization Alternatives	28-5
28.2	Proposed Action	28-6
28.2.1	Summary of Purpose and Need	28-6
28.2.2	Salt Lake County Alternatives	28-7
28.2.3	Utah County Alternatives	28-8
28.2.4	Tolling Option	28-10
28.3	Identification of Section 4(f) Resources	28-10
28.3.1	Section 4(f) Resources in Salt Lake County	28-10
28.3.2	Section 4(f) Resources in Utah County	28-19
28.4	Use of Section 4(f) Resources	28-25
28.4.1	Use of Section 4(f) Resources by the Salt Lake County Alternatives	28-26
28.4.2	Use of Section 4(f) Resources by the Utah County Alternatives	28-43
28.5	Avoidance Analysis	28-51
28.5.1	No-Action Alternative	28-51
28.5.2	Salt Lake County Avoidance Alternatives	28-51
28.5.3	Prudence of the 7200 West Freeway Alternative	28-70
28.5.4	Utah County Avoidance Alternatives	28-78
28.5.5	Prudence of the Southern Freeway and Arterials Alternatives	28-86
28.6	Measures To Minimize Harm	28-89
28.6.1	Measures To Minimize Harm to Historic Resources for All Alternatives in Salt Lake and Utah Counties	28-89
28.6.2	Measures To Minimize Harm to Parks and Recreation Areas in Salt Lake County for All Alternatives	28-90
28.6.3	Measures To Minimize Harm to Parks and Recreation Areas in Utah County for All Alternatives	28-92
28.7	Coordination	28-93
28.7.1	Coordination Efforts for Historic Resources	28-93
28.7.2	Coordination Efforts for Parks and Recreation Areas	28-94
28.8	References	28-95

This chapter addresses the requirements of Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966. Section 4(f) applies to publicly owned parks, recreation areas, and wildlife and waterfowl refuges and publicly or privately owned significant historic properties.

This chapter identifies Section 4(f) resources in the Section 4(f) impact analysis area, determines impacts to those resources, evaluates potential avoidance

alternatives and measures to minimize harm where necessary, and describes the coordination efforts made to address Section 4(f) issues and concerns.

Section 4(f) Impact Analysis Area. The Section 4(f) impact analysis area is the area adjacent to the action alternatives where resources could be affected in both Salt Lake and Utah Counties.

28.1 Regulatory Setting

Section 4(f) (49 United States Code [U.S.C.] 303) of the Department of Transportation Act of 1966 applies to publicly owned parks, recreation areas, and wildlife and waterfowl refuges and publicly or privately owned significant historic properties. The requirements of Section 4(f) apply only to agencies within USDOT (for example, the Federal Highway Administration [FHWA], Federal Transit Administration, and Federal Aviation Administration).

Section 4(f) prohibits USDOT agencies from approving the use of any Section 4(f) land for a transportation project, except as follows:

- First, the USDOT agency can approve the use of Section 4(f) land by making a determination that (1) there is no prudent and feasible alternative that would avoid the use of the Section 4(f) resource, *and* (2) the project includes all possible planning to minimize harm to that property.
- Second, the USDOT agency can approve the use of Section 4(f) property by making a finding of *de minimis* impact for that property.¹

To provide additional context for the Section 4(f) findings in this chapter, the following sections provide information regarding each of the steps in the process for complying with Section 4(f):

- Identifying Section 4(f) resources
- Determining whether there is a use of any Section 4(f) resource
- Determining which of the uses, if any, are *de minimis*
- Identifying and evaluating avoidance and minimization alternatives for any uses that are not determined to be *de minimis*

¹ The option of making a finding of *de minimis* impact was created by an amendment to Section 4(f) in Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was enacted in August 2005. This amendment was the first substantive change to Section 4(f) since it was enacted in 1966.

28.1.1 Identifying Section 4(f) Resources

Section 4(f) applies to publicly owned parks, recreation areas, and wildlife and waterfowl refuges as well as publicly or privately owned significant historic properties. FHWA is responsible for determining which properties qualify as a Section 4(f) resource.

28.1.1.1 Parks, Recreation Areas, and Refuges

Public lands that might qualify for the Section 4(f) regulations as parks, recreation areas, and refuges are identified as part of the National Environmental Policy Act (NEPA) process. In general, the boundaries of publicly owned parks, recreation areas, and refuges are well-established and can be readily identified. However, there are situations where the Section 4(f) status of publicly owned lands is unclear. For example, some publicly owned lands are managed for multiple uses or have no clear designation. In addition, there are some situations where privately owned lands are considered publicly owned for the purpose of Section 4(f) because the lands have been made available for public use under a lease or easement. Also, publicly owned land can be considered a Section 4(f) resource if it is planned to be developed as a park, recreation area, or refuge. Where a judgment call is needed, FHWA makes this determination in consultation with the authority that has jurisdiction over the resource. The authority with jurisdiction is the public agency that owns or manages the property.

28.1.1.2 Historic Resources

Through its Section 4(f) regulations, FHWA has established that a historic property is considered significant—and therefore qualifies as a Section 4(f) resource—if the site is listed in, or is eligible for listing in, the National Register of Historic Places (NRHP). The NRHP-eligible sites that are listed in or eligible for the NRHP are established under Section 106 of the National Historic Preservation Act. Section 106 consultation involves thorough research to identify and evaluate potential NRHP-eligible sites in the project area. The results of the Section 106 process are documented in Chapter 17, Historic, Archaeological, and Paleontological Resources.

28.1.2 Uses of Section 4(f) Resources

The FHWA regulations define three types of “uses” of Section 4(f) resources: direct use, constructive use, and temporary use.

- A *direct use* occurs when land from a Section 4(f) resource is “permanently incorporated into a transportation facility,” according to 23 Code of Federal Regulations (CFR) 771.135(p)(i).
- A *constructive use* occurs when there is no direct use, but the project’s proximity impacts—for example, noise or visual impacts—are “so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired.” The regulations state that a substantial impairment occurs “only when the protected activities, features, or attributes of the resource are substantially diminished,” according to 23 CFR 771.135(p)(iii). The FHWA regulations provide specific instructions and examples for determining whether a constructive use has occurred.
- A *temporary use* (23 CFR 771.135(p)(ii)) occurs when a temporary impact is “adverse in terms of the statute’s preservationist purposes.” The FHWA regulations, 23 CFR 771.135(p)(7), define five criteria that must be met to make a finding that a temporary occupancy is not a Section 4(f) use. These criteria are:
 - Duration must be temporary.
 - Scope of work must be minor.
 - There must be no anticipated permanent adverse physical impacts nor interference with the activities or purpose of the resource.
 - The resource must be fully restored.
 - There must be documented agreement with the appropriate federal, state, or local agencies having jurisdiction over the resource.

FHWA is responsible for determining whether a project would result in the “use” of a Section 4(f) resource. This determination is made based on information developed during the NEPA process and considers input received from agencies with jurisdiction over the Section 4(f) resource.

28.1.3 *De Minimis* Impacts

If a project results in a direct use of a Section 4(f) resource, FHWA can approve that use by making a finding of “*de minimis* impact.” In general, a finding of *de minimis* impact requires a determination that the project will have “no adverse effect” on the protected activities, features, or attributes of the resource. In making this determination, FHWA must consider any avoidance, minimization, mitigation, or enhancement measures that have been incorporated into the project.

The procedures for making *de minimis* impact determinations for parks, recreation areas, and refuges are slightly different from the procedures for making these determinations for historic sites.

For parks, recreation areas, and refuges, FHWA’s finding of *de minimis* impact requires the concurrence of the authority with jurisdiction over the resource, after the public has been given an opportunity to comment. The public comment opportunity generally is provided as part of the comment period on the NEPA document (such as an Environmental Impact Statement, or EIS).

For historic sites, FHWA’s finding of *de minimis* impact requires the concurrence of the State Historic Preservation Officer (SHPO), who has jurisdiction over historic sites (including archeological sites that qualify for Section 4(f) protection), and must be developed in consultation with any consulting parties involved in the Section 106 process. (See Chapter 17, Historic, Archaeological, and Paleontological Resources, for a discussion of the Section 106 consultation process.)

Further information regarding *de minimis* impact findings can be found in the FHWA guidance document *Guidance for Determining De Minimis Impacts to Section 4(f) Resources* (FHWA 2005a).

28.1.4 Avoidance and Minimization Alternatives

If an alternative would use a Section 4(f) resource and the use is not *de minimis*, FHWA can approve that alternative only by determining that (1) there is no prudent and feasible avoidance alternative, and (2) the project includes all possible planning to minimize harm resulting from the use.

These avoidance and minimization findings are made with regard to each individual Section 4(f) resource that would be used by an alternative. For example, if an alternative uses land from several different parks and historic sites, the Section 4(f) evaluation considers avoidance and minimization options for each of those locations.

In addition, avoidance and minimization are considered more globally when comparing alternatives. For example, if there are two alternatives, FHWA will compare the alternatives overall in terms of their level of impact on Section 4(f) resources. Generally, if there are any prudent and feasible alternatives that completely avoid the use of any Section 4(f) resources, FHWA must select one of them; if all of the prudent and feasible alternatives involve some use of Section 4(f) resources, FHWA must compare the alternatives and select the prudent and feasible alternative that minimizes harm to Section 4(f) resources.

For further information about Section 4(f) requirements, refer to the FHWA Section 4(f) regulations, which are contained in 23 CFR 771.135; the *FHWA Section 4(f) Policy Paper* (FHWA 2005b); and the *FHWA Guidance for Determining De Minimis Impacts to Section 4(f) Resources* (FHWA 2005a).

28.2 Proposed Action

28.2.1 Summary of Purpose and Need

The proposed Mountain View Corridor (MVC) would be a major north-south road and high-capacity transit facility located in western Salt Lake County. The corridor transitions to an east-west road in northern Utah County. The project is proposed by the Utah Department of Transportation (UDOT) and FHWA, primarily to address congestion and mobility problems and increase transit availability (see Section 1.3.1, Purpose of the Project, in Chapter 1). The need for the MVC was first identified by the Wasatch Front Regional Council (WFRC) and the Mountainland Association of Governments (MAG) in their respective long-range transportation plans. The long-range plans indicate a need for additional transportation capacity within the MVC study area and recommend an integrated multi-modal approach for addressing long-range transportation demand in the project area.

The primary purpose of the Mountain View Corridor project is to improve regional mobility by reducing roadway congestion and by supporting increased transit availability. Secondary objectives include supporting local growth, increasing roadway safety, and supporting increased bicycle and pedestrian options.

The MVC alternatives are discussed by county. For this EIS, the range of alternatives includes a No-Action Alternative as well as roadway and transit alternatives in Salt Lake and Utah Counties.

- All of the action alternatives include a new major north-south roadway improvement between Interstate 80 (I-80) in Salt Lake County and Interstate 15 (I-15) in Utah County north of Utah Lake. These action alternatives include a freeway in Salt Lake County and various combinations of freeway and arterial connections in Utah County.
- All of the alternatives include a high-capacity north-south transit line on 5600 West extending from the Salt Lake City International Airport in the north to Herriman in the southern part of Salt Lake County.
- Tolling options for each alternative are being considered and analyzed. The right-of-way footprint is the same for all tolled and non-tolled options and does not affect this analysis. However, the number of lanes for the tolling options is generally reduced by one lane in each direction due to less travel demand.

For a complete description of each alternative considered in this EIS, see Chapter 2, Alternatives.

28.2.2 Salt Lake County Alternatives

28.2.2.1 5600 West Transit Alternative

The 5600 West Transit Alternative would be part of both of the Salt Lake County roadway alternatives (5800 West Freeway and 7200 West Freeway Alternatives). The two transit options on 5600 West are as follows:

- Dedicated Right-of-Way Transit Option (center-running)
- Mixed-Traffic Transit Option (in the right travel lane)

Figure 28-1, Salt Lake County Alternatives, shows the proposed 24-mile transit alignment for both transit options.

Dedicated Right-of-Way Transit Option (Center-Running)

This transit option is separated from roadway traffic by a curb. This type of transit facility separates vehicle traffic from the transit technology (either light rail or bus rapid transit; the type of transit technology has not been determined). The Dedicated Right-of-Way Transit Option would generally use the center median along 5600 West.

Mixed-Traffic Transit Option

This transit option would be the same as the Dedicated Right-of-Way Transit Option except that it would have more station locations and the transit service is mixed with traffic. The Mixed-Traffic Transit Option would operate within the right vehicle travel lane along 5600 West in both directions. Whichever transit technology is used, it would require the transit vehicles to pull out of traffic at station locations.

28.2.2.2 5800 West Freeway Alternative

This roadway alternative includes a freeway from I-80 to a location near the Utah County–Salt Lake County line in Bluffdale (see Figure 28-1, Salt Lake County Alternatives). The cross-section generally includes three lanes in each direction between I-80 and State Route (SR) 201 and between 13400 South and 16000 South in Bluffdale. Four lanes in each direction are included between SR 201 and 13400 South.

28.2.2.3 7200 West Freeway Alternative

This alternative includes a freeway from I-80 to a location near the Utah County–Salt Lake County line in Bluffdale (see Figure 28-1). The cross-section generally includes three lanes in each direction between I-80 and SR 201 and between 13400 South and 16000 South in Bluffdale. Four lanes in each direction are included between SR 201 and 13400 South.

The 5800 West Freeway Alternative and the 7200 West Freeway Alternative converge at about 5400 South. Between 5400 South and about 16000 South in Bluffdale, the two alternatives merge and follow the same alignment (see Figure 28-1).

28.2.3 Utah County Alternatives

Three alternatives are being considered in Utah County. Note that the Utah County alternatives actually begin in Salt Lake County in Bluffdale near 16000 South. The three alternatives in Utah County include a freeway along the western benches of Saratoga Springs that connects to SR 73. Also, the alternatives include a connection to I-15.

28.2.3.1 Southern Freeway Alternative

This alternative consists of a six-lane, north-south freeway from Salt Lake County in the north that transitions to an east-west freeway just north of Utah Lake and connects to I-15 just south of the existing Pleasant Grove/Lindon

interchange. The alignment is about 15 miles long with grade-separated interchanges (see Figure 28-2, Southern Freeway Alternative).

28.2.3.2 2100 North Freeway Alternative

This alternative consists of a six-lane, north-south freeway from Salt Lake County in the north that diverges and connects at two different locations in Utah County. One part of the freeway section continues south and terminates at the existing SR 73 in Saratoga Springs. The other freeway section turns east at 2100 North in Lehi and connects with I-15 at the existing 1200 West interchange. The connection to I-15 would include a freeway-to-freeway interchange and a local-access interchange. These alignments are about 11 miles long with grade-separated interchanges (see Figure 28-3, 2100 North Freeway Alternative).

28.2.3.3 Arterials Alternative

This alternative consists of a six-lane, north-south freeway from Salt Lake County in the north that terminates at SR 73 in Saratoga Springs. This part of the alternative is about 7 miles long with grade-separated interchanges.

In addition, there are three east-west arterial components of this alternative (see Figure 28-4, Arterials Alternative):

- **1900 South Arterial in Lehi.** This road is a seven-lane arterial at 1900 South that would connect with Redwood Road on the west and continue to I-15 on the east. It would connect with I-15 at the Pleasant Grove/Lindon interchange and would be about 7 miles long with at-grade intersections. This arterial is part of the MAG long-range plan.
- **2100 North Arterial in Lehi.** This arterial would be a seven-lane, east-west road along 2100 North that extends between the freeway alignment in Saratoga Springs and I-15 in Lehi (1200 West interchange). It would be about 4 miles long with at-grade intersections. This arterial is part of the MAG long-range plan.
- **Porter Rockwell Boulevard in Bluffdale.** This road would be a seven-lane arterial between the Mountain View Corridor freeway alignment at about 16000 South and the I-15 interchange at 14600 South in Bluffdale (Salt Lake County). This road would be about 5 miles long with at-grade intersections.

28.2.4 Tolling Option

A tolling option is being considered for all the roadway alternatives studied in this EIS (Salt Lake County and Utah County alternatives). For more information about the tolling options, see Section 2.2.5, Tolling Options for the MVC Alternatives. Since the footprint for each tolling option would be the same as the footprint for the non-tolled alternative, the impacts would be the same. Additional analysis for the Section 4(f) evaluation for the Tolling Option is not necessary.

28.3 Identification of Section 4(f) Resources

This section discusses the Section 4(f) resources in the MVC study area that could be affected by the proposed alternatives. For each county, this section discusses historic resources followed by public parks and recreation areas. There are no publicly owned wildlife or waterfowl refuges in the MVC study area that qualify for the Section 4(f) regulations. Also, no archaeological resources within this area qualify under Section 4(f).

28.3.1 Section 4(f) Resources in Salt Lake County

28.3.1.1 Historic Resources

Historic resources for this project include houses, buildings, barns, and farmsteads and historic linear features such as canals and railroads.

Table 28.3-1 below lists the historic resources in Salt Lake County by alternative (the 5800 West Freeway and 7200 West Freeway Alternatives are identical between 5400 South and 16000 South). For detailed descriptions and photographs of the historic houses listed in Table 28.3-1, see Chapter 17, Historic, Archaeological, and Paleontological Resources, and Appendix 28A, Historic Properties within Mountain View Corridor Study Area.

Table 28.3-1. NRHP-Eligible Historic Resources in Salt Lake County

Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion^a
<i>5600 West Transit Alternative (Both Transit Options)</i>		
West Branch Brighton Canal (42SL304)	Historic irrigation/drainage canal.	A
Salt Lake Garfield and Western Railroad (42SL306)	Railroad tracks and grade.	A
Ridgeland Canal (43SL305)	Historic irrigation canal.	A
Western Pacific Railroad and Berm (42SL337)	Railroad tracks and grade. Abandoned railroad berm.	A
Union Pacific Railroad (UPRR) (42SL300)	Railroad tracks and grade.	A and C
Riter Canal (42SL274)	Historic irrigation canal.	A
5610 W. 2700 S.	Historic house considered a World War II (WWII)–Era Cottage built in 1950.	A and C
5666 W. 2700 S.	Historic house considered an Undefined Victorian style built in 1924.	A
3567 S. 5600 W.	Historic house considered a vernacular Period Revival style built in 1930.	A
3581 S. 5600 W.	Historic house built in 1940 considered a WWII-Era Cottage of minimal traditional style.	A
3601 S. 5600 W.	Historic house of Bungalow and Colonial Revival style built in 1930.	A
3602 S. 5600 W.	Historic house built in 1900 considered a Cross-Wing residence of vernacular Victorian Eclectic style.	A
3611 S. 5600 W.	Historic house considered Minimal Traditional style built in 1938.	A
3627 S. 5600 W.	Historic house considered a Bungalow style built in two phases. The first part was constructed in 1929 and the other in 1938.	A
3630 S. 5600 W.	Historic house considered Bungalow and Prairie School style built in 1923.	A
3653 S. 5600 W.	Historic house considered a WWII-Era Cottage of Minimal Traditional style built in 1940.	A
3663 S. 5600 W.	Historic house considered a Foursquare residence of vernacular Victorian Eclectic style built in 1900.	A
3672 S. 5600 W.	Historic house considered a Post WWII-Era style with 13 contributing outbuildings. This house was constructed in 1942.	A
3690 S. 5600 W.	Historic house considered a vernacular Bungalow that was constructed in 1930. This house was moved to its present location in 1960.	A
3750 S. 5600 W.	Historic house considered a Bungalow style built in 1944. There are no outbuildings on the site.	A
3775 S. 5600 W.	Historic house considered a general Ranch/Rambler style built in 1955.	A
3809 S. 5600 W.	Historic house considered a Bungalow residence constructed in 1926.	A

▲ ▲

Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion ^a
3827 S. 5600 W.	Historic house considered a Bungalow style built in 1925. There are no outbuildings on the site.	A
3846 S. 5600 W.	Historic house considered a general Bungalow style built in 1917 with 12 contributing outbuildings.	A
3870 S. 5600 W.	Historic house considered a general Early Ranch/Rambler style built in 1955.	A
3917 S. 5600 W.	Historic house considered a Bungalow style built in 1923. There are no outbuildings on the site.	A
4095 S. 5600 W.	Historic house considered a Ranch/Rambler style built in 1950.	A
Utah and Salt Lake Canal (42SL295)	Historic irrigation canal.	A
Denver & Rio Grande Western (D&RGW) Railroad Garfield Branch (42SL333)	Historic railroad tracks and grade.	A
D&RGW Railroad Bingham Branch (42SL335)	Railroad tracks and grade adjacent to Old Bingham Highway.	A
<i>5800 West Freeway Alternative</i>		
West Branch Brighton Canal (42SL304)	Historic irrigation/drainage canal.	A
Salt Lake Garfield and Western Railroad (42SL306)	Railroad tracks and grade.	A
Western Pacific Railroad and Berm (42SL337)	Railroad grade. Abandoned railroad berm.	A
Union Pacific Railroad (UPRR) (42SL300)	Railroad tracks and grade.	A
Riter Canal (42SL274)	Historic irrigation canal.	A
5610 W. 2700 S.	Historic house considered a WWII-Era Cottage built in 1950.	A and C
5666 W. 2700 S.	Historic house considered an Undefined Victorian style built in 1924.	A
5770 W. 2700 S.	Historic house considered a Rectangular Block style built in 1905.	A
5890 W. 3500 S.	Historic house considered a Bungalow with Period Revival style built in 1920.	A
5769 W. 3500 S.	Historic house considered a WWII-Era style exhibiting Minimal Traditional style built in 1940.	A
5765 W. 3500 S.	Historic house considered a WWII-Era Cottage exhibiting Minimal Traditional style built in 1930.	A
5755 W. 3500 S.	Historic house considered a WWII-Era Cottage exhibiting Minimal Traditional style built in 1940.	A and C
5742 W. 3500 S.	Historic house considered a WWII-Era Cottage exhibiting Minimal Traditional style built in 1915.	A and C
5741 W. 3500 S.	Historic house considered a Temple Form with Classical style built in 1890.	A and C

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Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion ^a
5724 W. 3500 S.	Historic house considered a WWII-Era Cottage with Minimal Traditional style built in 1930.	A and C
5712 W. 3500 S.	WWII-Era Cottage with Minimal Traditional style.	A
3525 S. 5750 W.	Historic house considered a Rectangular Block with vernacular Victorian style built in 1920.	A
3530 S. 5750 W.	Historic house considered an Early Ranch with Minimal Traditional style built in 1947.	A
3547 S. 5750 W.	Historic house considered a WWII-Era Cottage style built in 1956.	A
3556 S. 5750 W.	Historic house considered a Ranch/Rambler exhibiting Post WWII-Era style built in 1952.	A
3590 S. 5750 W.	Historic house considered a Period Cottage exhibiting Greek Revival built in 1937.	A
Utah and Salt Lake Canal (42SL295)	Historic irrigation canal.	A
D&RGW Railroad Garfield Branch (42SL333)	Railroad tracks and grade.	A
Bingham and Garfield Railroad (42SL384)	Historic railroad tracks and grade; the railroad would cross under the MVC alignment at about 7000 South and would parallel the MVC alignment on the east side.	A and B
D&RGW Railroad Bingham Branch (42SL335)	Railroad tracks and grade adjacent to Old Bingham Highway.	A
<i>7200 West Freeway Alternative</i>		
Salt Lake Garfield and Western Railroad (42SL306)	Railroad tracks that parallel I-80 on the south.	A
Western Pacific Railroad and Berm (42SL337)	Railroad grade; there are no tracks at this location.	A
Union Pacific Railroad (UPRR) (42SL300)	Railroad tracks that parallel the Western Pacific Railroad.	A
3075 S. 7200 W.	Historic house considered a Period Cottage with English Tudor style built in 1932.	A
3080 S. 7200 W.	Historic house considered a WWII-Era Cottage built in 1940.	A
3109 S. 7200 W.	Historic house considered an indeterminate 20th Century type built in 1940.	A
3372 S. 7200 W.	Historic house considered a Ranch/Rambler constructed in 1957.	A
7372 W. 3500 S.	Historic house considered a WWII-Era Cottage of Minimal Traditional style built in 1940.	A
7339 W. 3500 S.	Historic house considered a Hall-Parlor residence with Classical style built in 1870.	A and C
7329 W. 3500 S.	Historic house considered a Bungalow with Minimal Traditional style built in 1920.	A and C

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Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion ^a
7319 W. 3500 S.	Historic house considered a Central Block exhibiting Victorian-Era Queen Anne style built in 1880.	A and C
7015 W. 3500 S.	Historic house considered an Early Ranch with Post WWII-Era style built in 1950.	A
6921 W. 3500 S.	Historic house considered a Ranch with Rambler style built in 1955.	A and C
6891 W. 3500 S.	Historic house considered an Early Ranch built in 1950.	A and C
3551 S. 7200 W.	Historic house considered a WWII-Era Cottage exhibiting Minimal Traditional style built in 1950.	A and C
3641 S. 7200 W.	Historic house considered a Ranch/Rambler style built in 1955.	A
3717 S. 7200 W.	Historic house considered an Early Bungalow style built in 1914.	A
Utah and Salt Lake Canal (42SL295)	Historic irrigation canal.	A
D&RGW Railroad Garfield Branch (42SL333)	Historic railroad tracks.	A
Bingham and Garfield Railroad (42SL384)	Historic railroad tracks and grade; the railroad would cross under the MVC alignment at about 7000 South and would parallel the MVC alignment on the eastside.	A and B
D&RGW Railroad Bingham Branch (42SL335)	Railroad tracks and grade adjacent to Old Bingham Highway.	A

^a The NRHP criteria are defined in Chapter 17, Historic, Archaeological, and Paleontological Resources.

The linear historic resources (such as canals or railroad tracks) for both the transit and freeway alternatives in Salt Lake County are shown in Figure 28-5, Historic Linear Features in Salt Lake County. Figure 28-6, Historic Properties for Transit Alignments in Salt Lake County, shows the historic houses for the transit alternative; Figure 28-7, Historic Properties for Roadway Alignments in Salt Lake County, and Figure 28-8, Hunter Park and Historic Properties, show the historic houses within or adjacent to the freeway alternatives in Salt Lake County.

28.3.1.2 Public Parks and Recreation Areas

Section 4(f) applies to publicly owned parks and recreation areas including those that are planned on publicly owned property. The publicly owned (existing and planned) parks and recreation areas located within or in close proximity to the Salt Lake County alternatives are shown in Figure 28-9, Public Parks and Recreation Areas in Salt Lake County, and listed in Table 28.3-2 below.

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Table 28.3-2. Existing and Planned Public Parks and Recreation Areas in Salt Lake County

Park/Recreation Area	Location	Description of Publicly Owned Parks and Recreation Areas	Considered a Section 4(f) Resource?
<i>5600 West Transit Alternative (Both Transit Options)</i>			
Wingpointe Golf Course	3206 South 100 North at the entrance to the Salt Lake City International Airport	This 18-hole, links-style golf course is 193.5 acres in size. The course is owned and operated by Salt Lake City and is open to the general public. It is bisected by Bangerter Highway at the entrance to the Salt Lake City International Airport. Wingpointe Golf Course also has a clubhouse and practice facilities (including a driving range) and is open most of the year due to its low-lying location.	Yes
Lee Kay Center for Hunter Education	Southern border is SR 201 and the northern border is 1300 South; the east-west borders are 5600 West and 7200 West, respectively (see Figure 28-10, Land Uses for Lee Kay Center for Hunter Education, and Figure 28-11, Southeast Portion of Lee Kay Center for Hunter Education)	<p>The Lee Kay Center for Hunter Education is owned and operated by the Utah Division of Wildlife Resources. It is about 1,253 acres in size. Five shooting ranges are located in the southeastern corner of the property (see Figure 28-11, Southeast Portion of Lee Kay Center for Hunter Education). Other amenities include a trap and skeet area, an archery range, and a hunter safety range. The facility also has two classrooms used for hunter safety and education courses. A number of ponds lie along the northern boundary of the property, and several wildlife-viewing platforms overlook these ponds. These platforms are accessed from 1300 South.</p> <p>The shooting ranges are oriented north-south with targets on the north side. To the north of the shooting ranges is a storage and maintenance area. To the east is an open field which is separated from the shooting ranges by an earthen berm. Access to the open field is unrestricted. On occasion, the open field is used for dog-trial training. The open field includes a utility corridor and an access road that leads into the Center and to the storage and maintenance area. The open field is referred to as a safety zone by the Center. Figure 28-10, Land Uses for Lee Kay Center for Hunter Education, shows the different uses within the Lee Kay Center for Hunter Education property.</p> <p>Access to the classrooms, shooting ranges, and dog-trial training area is from the SR 201 frontage road (2100 South).</p> <p>UDOT and FHWA have corresponded with the Division of Wildlife Resources regarding the functions and uses at this facility. Several meetings have been held with the Division to discuss impacts and possible mitigation measures (see Appendix 28B, Lee Kay Center for Hunter Education Correspondence).</p>	Yes; FHWA has determined that the entire parcel (1,253 acres) is eligible as a Section 4(f) resource.
Centennial Park	5405 W. 3100 S.	This 77-acre park includes eight softball diamonds, an outdoor swimming pool, an ice rink, eight basketball courts, eight tennis courts, and the West Valley Family Fitness Center. The park is owned and operated by West Valley City.	Yes

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Park/Recreation Area	Location	Description of Publicly Owned Parks and Recreation Areas	Considered a Section 4(f) Resource?
West Ridge Golf Course	Southwest quadrant of 5600 West and 4700 South in West Valley City	This 18-hole golf course is owned and operated by West Valley City. The course is about 190 acres and is open to the general public.	Yes
<i>5800 West Freeway Alternative</i>			
Lee Kay Center for Hunter Education		See discussion above under the 5600 West Transit Alternative.	
Hunter Park	3500 South and about 6000 West	<p>This park is open to the public and is used for Little League baseball, softball tournaments, and youth soccer games. It is about 29 acres in size and includes four baseball/softball diamonds, bleachers, a concessions area, two soccer fields, two tennis courts, a volleyball court, two pavilions, and a playground. Figure 28-12, Hunter Park Property Ownership, shows the different uses at the park.</p> <p>Hunter Park is owned and maintained by Salt Lake County. The eastern portion of the park, which has been leased to Salt Lake County, is owned by Rocky Mountain Power. Rocky Mountain Power owns property on the eastern boundary of Hunter Park totaling 10.8 acres (see Figure 28-12). On August 10, 1981, an agreement was made between Utah Power and Light (now Rocky Mountain Power) and Salt Lake County stating that the County could use the Utah Power and Light property "...in connection with recreational facilities on adjacent areas" (see the attached agreement in Appendix 28C, Hunter Park Information and Correspondence). According to the August 10, 1981, lease agreement, a previous agreement had been made between Salt Lake County and Utah Power and Light that pre-dated the 1981 lease agreement.</p> <p>Because of this longstanding lease agreement, the property owned by Rocky Mountain Power is considered to be publicly owned as part of Hunter Park and therefore is considered a Section 4(f) resource.</p>	Yes; FHWA has determined that the entire park is considered a Section 4(f) resource.
Hunter High School athletic fields	4100 South 5600 West; athletic fields are located east of the school	<p>The Hunter High School athletic fields include a soccer field and softball field (see Figure 28-13, Hunter High School and Hillside Elementary School) located west of the school. Their main use is for school-related activities.</p> <p>The soccer field and softball field are about 6.0 acres in size.</p> <p>As part of Section 4(f), the authority with jurisdiction is the Granite School District</p>	Yes. FHWA has determined that the athletic fields are eligible as a Section 4(f) resource. Their eligibility is based on policies established by the Granite School District.

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Park/Recreation Area	Location	Description of Publicly Owned Parks and Recreation Areas	Considered a Section 4(f) Resource?
Hillside Elementary School Athletic Fields	4400 South and 6200 West; east of Hillside Elementary School	<p>The Hillside Elementary School athletic fields are located east of the school and are about 5.8 acres in size (see Figure 28-13). Hillside Elementary School is a year-round school that is in session for 11 months of the year (end of July to end of June).</p> <p>There is one informal baseball diamond with a backstop and a soccer field with goal posts (within the baseball diamond area).</p> <p>The school athletic fields are not open to the general public at all times. The Mountain View Corridor team has consulted with the principal of this school (see Appendix 28E, Coordination with Granite School District and Hillside Elementary School).</p> <p>As part of Section 4(f), the authority with jurisdiction is the Granite School District.</p>	Yes. FHWA has determined that the athletic fields are eligible as a Section 4(f) resource. Their eligibility is based on policies established by the Granite School District.
West Ridge Golf Course		See discussion above under the 5600 West Transit Alternative.	
Ron Wood Wash Baseball Complex	Intersection of New Bingham Highway and 9000 South	The Ron Wood Wash Baseball Complex is a publicly owned baseball facility that has five baseball/softball diamonds. This 30-acre site also contains bleachers, a trail, and a pavilion. This complex is owned and operated by the City of West Jordan.	Yes
Western Springs Park	12600 South and 4800 West in Riverton	<p>Western Springs Park is about 30 acres. Part of this park has been constructed; however, the area adjacent to the MVC has not been built. Riverton City owns the land, but Salt Lake County Parks and Recreation constructed, maintains, and schedules the facility. Design of the Western Springs Park began in late 2004 with initial construction starting in 2005. When completed, the park will include three lighted softball fields, a soccer field, sleigh-riding hills, a snack shack and equipment shed, and a large pavilion.</p> <p>This planned/existing park is considered a Section 4(f) resource since the property that will be or has been constructed is publicly owned. The Mountain View Corridor team has met with Riverton City and Salt Lake County Parks and Recreation regarding Western Springs Park and its development. Section 4(f) applies to publicly owned lands where parks and/or recreation facilities are planned.</p> <p>Information regarding the development of this park is included in Appendix 28D, Western Springs Park Correspondence (Joint Use Letters).</p>	Yes
Monarch Meadows Park	Monarch Meadows Parkway and about 5000 West in Riverton	Monarch Meadows Park is about 20.4 acres in size and has two soccer fields, a playground, a picnic area, a pavilion, trails, and off-street parking. This park is owned and maintained by Riverton City and is open to the general public.	Yes
Foothill Park	Grandview Peak Drive and about 5000 West in Herriman	Foothill Park is owned by Salt Lake County and is open to the general public. This park is about 3.3 acres in size. Its amenities include open space and a play area. Parking is on Grandview Peak Drive.	Yes

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Park/Recreation Area	Location	Description of Publicly Owned Parks and Recreation Areas	Considered a Section 4(f) Resource?
<i>7200 West Freeway Alternative</i>			
Lee Kay Center for Hunter Education		See discussion above under the 5600 West Transit Alternative.	
Falcon Crest Park	About 4000 South and 7000 West	Falcon Crest Park is a park that is planned by West Valley City and is included in the City's General Plan. It is planned to be about 1.5 acres in size. The property is currently owned by West Valley City.	Yes
West Ridge Golf Course		See discussion above under the 5600 West Transit Alternative.	
Ron Wood Wash Baseball Complex		See discussion above under the 5800 West Freeway Alternative.	
Western Springs Park		See discussion above under the 5800 West Freeway Alternative.	
Monarch Meadows Park		See discussion above under the 5800 West Freeway Alternative.	
Foothill Park		See discussion above under the 5800 West Freeway Alternative.	

28.3.1.3 Existing and Planned Trails and Bicycle Facilities

Several existing and planned trails and bicycle facilities lie within the impact analysis area in Salt Lake County. These facilities exist or are planned within existing rights-of-way for cross streets, canals, or other linear features. In cases where they are within the roadway right-of-way, these trails will function as part of the roadway (sidewalk or shoulder); they are not solely for recreational uses.² The March 1, 2005, FHWA Section 4(f) Policy Paper addresses whether trails on highway rights-of-way, which are designated as recreation trails, are subject to the requirements of Section 4(f). The guidance states that “if the trail is simply described as occupying the right-of-way of the highway and is not limited to any specific location within the right-of-way, a use of land would not occur...” as long as the alignment would not substantially impair the continuity of the trail.

The existing and proposed trails and bicycle facilities in Salt Lake County are listed Chapter 11, Considerations Relating to Pedestrians and Bicyclists. None of the existing or planned facilities qualify as a Section 4(f) resource because they are all on land that is privately owned. Also, the existing and planned bicycle facilities along roads are not solely for recreation and will be used as part of the overall transportation system in the Salt Lake Valley. No further Section 4(f) analysis is required for existing or planned trails and bicycle facilities in Salt Lake County.

² Where a trail system currently exists apart from existing or planned roadways, it is considered a recreation resource and is discussed in that section of this evaluation. An example is the Jordan River Parkway Trail in Utah County.

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28.3.2 Section 4(f) Resources in Utah County

28.3.2.1 Historic Resources

Table 28.3-3 lists the historic resources in the Utah County impact analysis area by alternative. For detailed descriptions and photographs of the historic houses listed in Table 28.3-3, see Chapter 17, Historic, Archaeological, and Paleontological Resources, and Appendix 28A, Historic Properties within Mountain View Corridor Study Area.

Table 28.3-3. NRHP-Eligible Historic Resources in Utah County

Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion
<i>Southern Freeway Alternative</i>		
Provo Reservoir Canal/Murdock Ditch (42SL287 and 42UT947)	Three segments of this canal are crossed by the Utah County alternatives: <ul style="list-style-type: none"> • Segment 1 is in Bluffdale and is about 1 mile long. • Segment 2 is in Saratoga Springs at 2100 North. • Segment 3 is in Saratoga Springs near SR 73. The Southern Freeway Alternative crosses Segment 1 and Segment 3.	A
Salt Lake and Western Railroad (42UT948)	Historic railroad grade; tracks no longer exist. Two segments are located in Utah County: <ul style="list-style-type: none"> • Segment 1 is in Saratoga Springs near SR 73. • Segment 2 is in Lehi at 2100 North. The Southern Freeway Alternative crosses Segment 1.	A
Utah Lake Distributing Canal (42SL287 and 42UT946)	Three canal segments are within the Utah County impact analysis area: <ul style="list-style-type: none"> • Segment 1 is in Bluffdale east of Redwood Road. • Segment 2 is in Lehi at 2100 North. • Segment 3 is in Saratoga Springs south of SR 73. The Southern Freeway Alternative crosses Segment 3 in Saratoga Springs.	A
Gardner Canal (42UT944)	Two segments of this canal are within the Utah County impact analysis area: <ul style="list-style-type: none"> • Segment 1 is located in Lehi at 2100 North. • Segment 2 is located in Saratoga Springs south of SR 73. The Southern Freeway Alternative crosses Segment 2 in Saratoga Springs.	A
Denver and Rio Grande Railroad (42SL293 and 42UT1125)	Three segments of this historic railroad are within the Utah County impact analysis area: <ul style="list-style-type: none"> • Segment 1 is in Bluffdale near the Jordan River. • Segment 2 is in Lehi at 2100 North. • Segment 3 is in American Fork just east of I-15. The Southern Freeway Alternative crosses Segment 3.	A
7364 N. 9550 W., Lehi	Historic house considered a WW-II Era Minimal Traditional style with aluminum siding built in 1937. Three noncontributing outbuildings are located on the parcel.	A

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Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion
<i>2100 North Freeway Alternative</i>		
Provo Reservoir Canal/Murdock Ditch (42SL287 and 42UT947)	There are three segments of this canal. The 2100 North Freeway Alternative crosses all three segments.	A
Salt Lake and Western Railroad (42UT948)	Historic railroad grade; tracks no longer exist. There are two segments of this railroad track; this alternative crosses both of them.	A
Utah Lake Distributing Canal (42SL287 and 42UT946)	Three canal segments are within the Utah County impact analysis area. Only Segment 2 at 2100 North is crossed by this alternative.	A
Gardner Canal (42UT944)	The 2100 North Freeway Alternative crosses Segment 2 at 2100 North in Lehi.	A
Denver and Rio Grande Railroad (42SL293 and 42UT1125)	The 2100 North Freeway Alternative crosses Segment 2 at 2100 North in Lehi.	A
1025 W. State Street, Lehi	Historic service-bay business considered a Post-WWII and Contemporary Style constructed in 1958.	A
1020 W. State Street, Lehi	Historic house considered a Period Cottage/WWII-Era Cottage built in 1941.	A
1060 W. State Street, Lehi	Historic house considered a Period Cottage/WWII-Era Cottage built in 1941.	A
959 W. 2100 N., Lehi	Historic house considered a WWII-Era Cottage of Minimal Traditional style built in 1940. This historic house is located on the east side of I-15 near the 1200 West interchange.	A
951 W. 2100 N., Lehi	Historic house that is possibly a late-period Foursquare-type structure built in about 1937. This historic house is located on the east side of I-15 near the 1200 West interchange.	A
<i>Arterials Alternative</i>		
Provo Reservoir Canal/Murdock Ditch (42SL287 and 42UT947)	The Arterials Alternative crosses all three segments of this canal in the Utah County impact analysis area. Segments 1 and 3 are crossed by the freeway element of this alternative, and Segment 2 is crossed by the 2100 North arterial.	A
Salt Lake and Western Railroad (42UT948)	Historic railroad grade; tracks no longer exist. The Arterials Alternative crosses this historic railroad grade at both segments in the Utah County impact analysis area. The 2100 North arterial crosses Segment 1, and the freeway element crosses Segment 2 near SR 73.	A
Salt Lake and Utah Railroad (42SL510)	Historic railroad grade; tracks no longer exist. This historic railroad grade is crossed by the Porter Rockwell Boulevard arterial in Bluffdale.	A
Utah Lake Distributing Canal (42SL287 and 42UT946)	The Arterials Alternative crosses two segments of this canal. Segment 1 is crossed by Porter Rockwell Boulevard, and Segment 2 is crossed by the 2100 North arterial.	A
Utah and Salt Lake Canal (42SL295)	This canal is crossed by the Porter Rockwell Boulevard alignment.	A

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Resource Identification (Name, Address, and/or Site Number)	Description of Historic Properties and Resources	NRHP Criterion
Denver and Rio Grande Railroad (42SL293 and 42UT1125)	The Arterials Alternative crosses all three segments of these historic railroad tracks. Porter Rockwell Boulevard crosses Segment 1 at the Jordan Narrows, the 2100 North arterial crosses Segment 2, and the 1900 South arterial crosses Segment 3.	A
South Jordan Canal (42SL291)	The Arterials Alternative crosses this canal by Porter Rockwell Boulevard at the Jordan Narrows.	A
Jordan and Salt Lake City Canal (42SL214)	The Arterials Alternative crosses this canal by Porter Rockwell Boulevard at the Jordan Narrows.	A
East Jordan Canal (42SL290)	The Arterials Alternative crosses this canal by Porter Rockwell Boulevard at the Jordan Narrows.	A
Draper Irrigation Canal (42SL35)	The Arterials Alternative would affect this canal by the Porter Rockwell Boulevard alignment. Nearly 2.5 miles of this canal are near the Porter Rockwell Boulevard alignment. A 2,000-foot section of this canal has been piped since completion of the cultural resources inventory for this project.	A
15400 S. Pony Express Road, Bluffdale	Historic house considered not eligible. However, six agricultural outbuildings constructed in 1945 are considered eligible for the NRHP. It is located along the Porter Rockwell Boulevard alignment.	A
475 W. 14600 S., Bluffdale	Historic house of general 20th-Century style constructed in 1930. This house is near I-15 and 14600 South near the Porter Rockwell Boulevard alignment.	A
Gardner Canal (42UT944)	The Arterials Alternative crosses Segment 2 of this canal at 2100 North.	A
1025 W. State Street, Lehi	Historic service-bay business considered a Post-WWII and Contemporary Style constructed in 1958.	A
1020 W. State Street, Lehi	Historic house considered a Period Cottage/WWII-Era Cottage built in 1941.	A
1060 W. State Street, Lehi	Historic house considered a Period Cottage/WWII-Era Cottage built in 1941.	A
959 W. 2100 N., Lehi	Historic house considered a WWII-Era Cottage of Minimal Traditional style built in 1940. This historic house is located on the east side of I-15 near the 1200 West interchange.	A
951 W. 2100 N., Lehi	Historic house that is possibly a late-period Foursquare-type structure built in about 1937. This historic house is located on the east side of I-15 near the 1200 West interchange.	A
7364 N. 9550 W., Lehi	Historic house considered a WWII-Era Minimal Traditional style with aluminum siding built in 1937. Three noncontributing outbuildings are located on the parcel.	A

The linear historic properties (such as canals, railroad tracks, and railroad grades) are shown in Figure 28-14, Historic Linear Features in Utah County, for the three alternatives in Utah County. The historic houses are shown in Figure 28-15, Historic Properties in Utah County.

Multiple Property Submission

Unlike other areas through which the proposed MVC alternatives would pass, the northern Utah County area is largely characterized by an agricultural landscape consisting of such features as open fields, farmsteads, irrigation canals, field ditches, and transportation systems. Many of these features and the overall agricultural landscape have their origins in the historical period.

In recognition of this landscape, an NRHP Multiple Property Submission (MPS) form was prepared. The MPS form identified the types of sites and features that are typically found in historical agricultural landscapes and established criteria by which individual examples of these sites and features could be evaluated for their historical significance and eligibility for listing in the NRHP. In essence, the MPS establishes a context for considering historical elements of the agricultural landscape and functions as a tool for evaluating the importance of those elements. The overall landscape described in the MPS form is not a cultural resource in itself. However, individual elements identified in the MPS form, such as several of the irrigation canals and farmsteads discussed Section 17.2.3.1, Architectural Properties, and Section 17.2.3.2, Archaeological Sites, of Chapter 17 are considered historic or archaeological resources and individually qualify as a Section 4(f) resource. No historic farmsteads were identified as part of the MPS that are found near or within any of the Mountain View Corridor alternatives in Utah County.

The historic canals that are part of the MPS and are included as separate Section 4(f) resources are the Provo Reservoir Canal/Murdock Ditch, the Utah Lake Distributing Canal, and the Gardner Canal. Secondary and tertiary irrigation ditches (that is, small, unnamed field ditches) are also part of the MPS landscape but are not individually eligible for inclusion in the NRHP and do not qualify as a Section 4(f) resource.

The approximate boundaries for which the MPS was developed extend south from the Utah County–Salt Lake County line to the Pleasant Grove city boundaries east to I-15 and west to the foothills above Saratoga Springs.

The MPS form was submitted to, and accepted by, the Utah SHPO as a basis for evaluating the eligibility of individual resources in the MVC study area.

28.3.2.2 Public Parks and Recreation Areas

The existing and planned publicly owned parks and recreation areas that are located within or adjacent to the alternatives in the Utah County impact analysis area are shown in Figure 28-16, Public Parks and Recreation Areas in Utah County, and are described in Table 28.3-4 below.

Table 28.3-4. Existing and Planned Public Parks and Recreation Areas in Utah County

Park/Recreation Area	Location	Description of Publicly Owned Parks and Recreation Areas	Considered a Section 4(f) Resource?
<i>Southern Freeway Alternative</i>			
Jordan River Parkway Trail	Along banks of the Jordan River between 17000 South in Bluffdale and Utah Lake in Utah County	<p>This publicly owned and maintained facility extends 9 miles along the banks of the Jordan River. The Jordan River Parkway Trail Authority (maintained and operated by Utah County Public Works in Utah County and Salt Lake County Parks and Recreation in Salt Lake County) owns this trail, which is open to the general public. In Utah County, this multi-use trail is paved and is generally 8 feet to 10 feet wide. The trail extends into Salt Lake County to about 17000 South in Bluffdale. From there, the trail is intermittent to the Great Salt Lake and not constructed where the Porter Rockwell Boulevard would cross. Eventually, this trail will reach the Great Salt Lake, which will create a contiguous corridor between Utah Lake and the Great Salt Lake.</p> <p>The trail is used by joggers, walkers, bicyclists, horseback riders, and inline skaters. The trail connects to other recreation areas including Inlet Park, Wetlands Park, Willow Park, Indian Ford Park, and the privately owned Thanksgiving Point area.</p> <p>The trail provides access to canoeing and fishing along the river as well as hiking, nature viewing, and horseback riding.</p> <p>Within the Utah County impact analysis area, the trail is currently crossed by three existing roads: Saratoga Road, SR 73 (Lehi's Main Street), and 9600 North. All of these crossings are at-grade.</p>	Yes
Northlake Park	2000 South 500 West, Lehi	Northlake Park is owned by Lehi City and is open to the general public. This park is about 28 acres in size and lies just north of Utah Lake. This park is considered a community park which is larger than neighborhood parks. Not all of the park's amenities have been constructed at this time. A playground, pavilions, and restrooms are planned for construction in the future. A secondary irrigation pond is located within the park boundary.	Yes
<i>2100 North Freeway Alternative</i>			
Jordan River Parkway Trail		See discussion above under the Southern Freeway Alternative.	
Pointe Meadow Park	2145 N. Pointe Meadow Drive, Lehi	Pointe Meadow Park is owned and operated by Lehi City. This publicly owned park is about 5.2 acres in size and includes a playground, basketball court, tennis court, and a pavilion. It also houses a satellite library for the city of Lehi.	Yes

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Park/Recreation Area	Location	Description of Publicly Owned Parks and Recreation Areas	Considered a Section 4(f) Resource?
<i>Arterials Alternative</i>			
Jordan River Parkway Trail		See discussion above under the Southern Freeway Alternative.	
Pointe Meadow Park		See discussion above under the 2100 North Freeway Alternative.	
Northlake Park		See discussion above under the Southern Freeway Alternative.	

28.3.2.3 Existing and Planned Trails and Bicycle Facilities

A number of existing and planned trails and bicycle facilities are located in the Utah County impact analysis area; the Jordan River Parkway Trail is discussed above in Table 28.3-4, Existing and Planned Public Parks and Recreation Areas in Utah County. For the same reasons discussed in Section 28.3.1.3, Existing and Planned Trails and Bicycle Facilities, Section 4(f) does not apply to these existing and planned facilities in the Utah County impact analysis area.

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28.4 Use of Section 4(f) Resources

This section evaluates the potential for a “use” of the Section 4(f) resources by any of the action alternatives being considered for the MVC project. This section is organized by the impact analysis area for each county³ (the Salt Lake County and Utah County impact analysis areas). The discussion of each impact analysis area is divided into two sections: a discussion of historic resources and a discussion of parks and recreation areas. Within each of those sections, the discussion is organized by alternative. For each Section 4(f) resource, this chapter makes one of the following findings:

- Direct use; *de minimis*
- Direct use; not *de minimis*
- No use

A finding of direct use “*de minimis*” was made when an alternative involved *a direct physical impact on a Section 4(f) resource but no adverse effect on the significant qualities of the resource*. For example, this finding was made when an alternative required a small strip of right-of-way along the edge of a Section 4(f) resource or when an alternative would place a new crossing over a historic canal or railroad track. For historic properties, this Section 4(f) finding of “*de minimis* use” corresponds to a finding of “no adverse effect” for the Section 106 process.

A finding of “use”—that is, a non-*de minimis* use (direct use; not *de minimis*)—was made when an alternative involved *a direct physical impact on a Section 4(f) resource and that impact causes an adverse effect on the significant qualities of the resource*. This is the type of use that can be approved only if FHWA finds that there is no prudent and feasible alternative to the use of the resource and that the project includes all possible planning to minimize harm to that property. For historic properties, this Section 4(f) finding of “use” corresponds to a finding of “adverse effect” for the Section 106 process (see Chapter 17, Historic, Archaeological, and Paleontological Resources).

The Utah SHPO has entered into an agreement with UDOT and FHWA regarding Section 4(f) and *de minimis* use. A copy of this Programmatic Agreement is found in Appendix 28F, *De Minimis* Correspondence for Public Parks and Copy of the Programmatic Agreement between SHPO, UDOT, and FHWA on Section 4(f) *De Minimis*. It states that, “for historic properties, a finding of *de minimis* impact on a historic site may be made by the FHWA when Section 106 consultation results in the written concurrence of the SHPO with

³ The northern portion of the Utah County impact analysis area includes a portion of Bluffdale in Salt Lake County. Porter Rockwell Boulevard, which is in Bluffdale and Draper, is included in the Utah County impact analysis area for ease of discussion and analysis.

determination of ‘no adverse effect’ or ‘no historic properties affected’.” As documented in Chapter 17, a Determination of Eligibility/Finding of Effect and an addendum Determination of Eligibility/Finding of Effect have been approved by the SHPO which document the Section 106 effect for each eligible historic property. A copy of both Determination of Eligibility/Finding of Effects is found in Chapter 17, Appendix 17B, Cultural Resources Correspondence.

A finding of “no use” was made when an alternative *avoided any direct physical impact on a Section 4(f) property and there would be no constructive or temporary use*. For historic properties, this Section 4(f) finding of “no use” corresponds to a finding of “no effect” or “no historic properties affected” for the Section 106 process.

For ease of reference, the tables below include both Section 106 findings and Section 4(f) findings for historic resources. For further explanation of the Section 106 findings, see Chapter 17, Historic, Archeological, and Paleontological Resources.

28.4.1 Use of Section 4(f) Resources by the Salt Lake County Alternatives

28.4.1.1 Historic Resources

5600 West Transit Alternative

Table 28.4-1 summarizes the impacts to historic resources for both of the 5600 West Transit Options in Salt Lake County.

Table 28.4-1. Summary of Section 4(f) Uses of Historic Resources from the 5600 West Transit Alternative

Section 4(f) Type of Use	Section 106 Type of Effect	Transit Option	
		Dedicated Right-of-Way	Mixed- Traffic
Direct use; <i>de minimis</i>	No adverse effect	20	20
Direct use; not <i>de minimis</i>	Adverse effect	0	0

Table 28.4-2 below describes the impacts resulting from the transit alternative. The impacts are shown in Figure 28-17, Impacts to Historic Properties for Transit Alignments in Salt Lake County.

Table 28.4-2. Description of Uses of Historic Resources from the 5600 West Transit Alternative

Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect		Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
West Branch Brighton Canal (42SL304)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Crosses just north of I-80 by culvert.	Crosses over bridge just south of the I-80 interchange with 5600 West.
Salt Lake Garfield and Western Railroad (42SL306)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Crosses just north of I-80 at-grade or grade-separated.	Crosses over on a bridge (same bridge as the West Branch Brighton Canal).
Ridgeland Canal (43SL305)	No effect	No effect	No use	No use	No impact.	No impact.
Western Pacific Railroad and Berm (42SL337)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Currently, 5600 West crosses at-grade; transit crossing would be at-grade or grade-separated.	Currently, 5600 West crosses at-grade; transit crossing would be at-grade or grade-separated.
Union Pacific Railroad (UPRR) (42SL300)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Currently, 5600 West crosses at-grade; transit crossing would be at-grade or grade-separated.	Currently, 5600 West crosses at-grade; transit crossing would be at-grade or grade-separated.
Ritter Canal (42SL274)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Currently, 5600 West crosses over this canal. For this alternative, the existing crossing would not have to be widened.	Currently, 5600 West crosses over this canal. For this alternative, the existing crossing would have to be widened by about 20 feet.
5610 W. 2700 S.	No effect	No effect	No use	No use	No impact.	No impact.
5666 W. 2700 S.	No effect	No effect	No use	No use	No impact.	No impact.

CHAPTER 28: SECTION 4(F) EVALUATION

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect		Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
3567 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 500 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 450 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3581 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 450 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 550 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3601 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 250 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 250 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3602 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.
3611 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 250 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 250 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect		Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
3627 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 150 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 150 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3630 S. 5600 W.	No adverse effect	No effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 250 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 250 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3653 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.
3663 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.
3672 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 1,600 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 1,600 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3690 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 300 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 300 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3750 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.

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CHAPTER 28: SECTION 4(F) EVALUATION

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect		Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
3775 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 250 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 250 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3809 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 300 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 300 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3827 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.
3846 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 250 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 250 square feet of this historic property. It would affect the western edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3870 S. 5600 W.	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	This alternative would affect about 200 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.	This alternative would affect about 200 square feet of this historic property. It would affect the eastern edge of the historic property, resulting in a strip take. No historic features or structures would be affected.
3917 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.
4095 S. 5600 W.	No effect	No effect	No use	No use	No impact.	No impact.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect		Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
Utah and Salt Lake Canal (42SL295)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Currently, 5600 West crosses over this canal by a culvert. The crossing would need to be widened about 30 feet.	Currently, 5600 West crosses over this canal by a culvert. The crossing would need to be widened about 30 feet.
D&RGW Railroad Garfield Branch (42SL333)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	Currently, 5600 West crosses at-grade separated. If an at-grade crossing is used, it would have to be widened about 80 feet.	Currently, 5600 West crosses at-grade. It is unknown if the future crossing would be at-grade or grade-separated. If an at-grade crossing is used, it would have to be widened about 100 feet.
D&RGW Railroad Bingham Branch (42SL335)	No adverse effect	No adverse effect	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	A new crossing would be required of this historic railroad. The crossing would be about 40 feet wide.	A new crossing would be required of this historic railroad. The crossing would be about 40 feet wide.

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5800 West Freeway and 7200 West Freeway Alternatives

Table 28.4-3 summarizes the impacts from the Salt Lake County freeway alternatives.

Table 28.4-3. Summary of Section 4(f) Uses of Historic Resources from the Salt Lake County Freeway Alternatives

Section 4(f) Type of Use	Section 106 Type of Effect	Alternative	
		5800 West Freeway	7200 West Freeway
Direct use; <i>de minimis</i>	No adverse effect	9	8
Direct use; not <i>de minimis</i>	Adverse effect	11	5

Table 28.4-4 below describes the impacts to historic properties in Salt Lake County from the 5800 West Freeway and 7200 West Freeway Alternatives, the types of Section 106 effect (no effect, no adverse effect, and adverse effect), and the Section 4(f) use for each historic property. Shaded rows indicate that the impact to the resource is considered an adverse effect under Section 106 and a direct use (not *de minimis*) under Section 4(f). Because these alternatives would involve a Section 4(f) use and the use would not be *de minimis*, these alternatives require an avoidance analysis, which is discussed in Section 28.5, Avoidance Analysis.

The tolling option for each freeway alternative would affect the same historic properties as the non-tolled alternative. The right-of-way footprint would be the same for the tolling options as for the non-tolling options. The impacts to historic houses are shown in Figure 28-18, Impacts to Hunter Park and Section 4(f) Resources, for the 5800 West Freeway Alternative, and Figure 28-19, Impacts to Historic Properties for 7200 West in Salt Lake County, for 7200 West in Salt Lake County.

Table 28.4-4. Description of Uses of Historic Resources from the Salt Lake County Freeway Alternatives

Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
<i>5800 West Freeway Alternative</i>			
West Branch Brighton Canal (42SL304)	No adverse effect	Direct use; <i>de minimis</i>	The connection of the 5800 West alignment with I-80 would affect 1,500 linear feet of this canal.
Salt Lake Garfield and Western Railroad (42SL306)	No adverse effect	Direct use; <i>de minimis</i>	The 5800 West alignment would cross over this railroad with three separate bridges that are needed for the connection to I-80 (mainline, eastbound, and westbound). The bridges would be used and would span the length of the railroad grade and tracks.
Western Pacific Railroad and Berm (42SL337)	No adverse effect	Direct use; <i>de minimis</i>	The 5800 West alignment would cross over this railroad track and grade with a bridge. The track and grade would be completely spanned by the 5800 West alignment. 5800 West alignment would cross over this railroad grade and would affect about 550 linear feet.
Union Pacific Railroad (UPRR) (42SL300)	No adverse effect	Direct use; <i>de minimis</i>	The 5800 West alignment would cross over this railroad track and grade with a bridge. The 5800 West Freeway Alignment would completely span the track and grade.
Riter Canal (42SL274)	No adverse effect	Direct use; <i>de minimis</i>	The 5800 West alignment would cross over this historic canal and would affect about 400 linear feet.
5610 W. 2700 S.	No effect	No use	No impact; no further Section 4(f) analysis is required.
5666 W. 2700 S.	No effect	No use	No impact; no further Section 4(f) analysis is required.
5770 W. 2700 S.	No effect	No use	No impact; no further Section 4(f) analysis is required.
5890 W. 3500 S.	No effect	No use	No impact; no further Section 4(f) analysis is required.
5769 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
5765 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
5755 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
5742 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
5741 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
5724 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of this resource. The 5800 West alignment would include an interchange with 3500 South at this location. Due to its close proximity to the interchange and the 5800 West alignment, no access can be provided to this historic property. Also, the interchange would require the use of the rock wall in front of this property, which is considered a contributing eligible feature.
5712 W. 3500 S.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
3525 S. 5750 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires the removal of this resource. The 5800 West alignment would include an interchange with 3500 South at this location. Due to its close proximity to the interchange and the 5800 West alignment, no access can be provided to this historic property.
3530 S. 5750 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
3547 S. 5750 W.	No effect	No use	The 5800 West alignment avoids affecting this historic property. There would be no constructive use of this historic house.
3556 S. 5750 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
3590 S. 5750 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 5800 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the resource. This is a direct/permanent use according to Section 4(f).
Utah and Salt Lake Canal (42SL295)	No adverse effect	Direct use; <i>de minimis</i>	The 5800 West alignment would cross over this canal, affecting about 550 linear feet.
D&RGW Railroad Garfield Branch (42SL333)	No adverse effect	Direct use; <i>de minimis</i>	The 5800 West alignment would cross over this railroad track and grade with a bridge. The track and grade would be spanned by the 5800 West alignment.
Bingham and Garfield Railroad (42SL384)	No adverse effect	Direct use; <i>de minimis</i>	The MVC alignment would cross over these historic railroad tracks and grade at about 7000 South. Also, an interchange at 6200 South would require an at-grade crossing.
D&RGW Railroad Bingham Branch (42SL333)	No adverse effect	Direct use; <i>de minimis</i>	The MVC alignment would cross over this railroad track and grade with a bridge. The track and grade would be completely spanned by the MVC alignment.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
<i>7200 West Freeway Alternative</i>			
Salt Lake Garfield and Western Railroad (42SL306)	No adverse effect	Direct use; <i>de minimis</i>	The 7200 West alignment would cross over this railroad with three separate bridges that are needed for the connection to I-80 (mainline, I-80 eastbound onto the MVC, and MVC onto I-80 eastbound). Bridges would be used to span the railroad grade and tracks.
Western Pacific Railroad and Berm (42SL337)	No adverse effect	Direct use; <i>de minimis</i>	The 7200 West alignment mainline would cross over this railroad track by bridge. The railroad grade and tracks would be spanned.
Union Pacific Railroad (UPRR) (42SL300)	No adverse effect	Direct use; <i>de minimis</i>	The 7200 West mainline alignment would cross over this railroad track by bridge. The railroad grade and tracks would be spanned.
3075 S. 7200 W.	No effect	No use	No impact; no further Section 4(f) analysis is required. There would be no constructive-use impacts at this location.
3080 S. 7200 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 7200 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the historic resource. All of the historic elements that make this property eligible for the NRHP would be removed as a result of the alternative.
3109 S. 7200 W.	No adverse effect	Direct use <i>de minimis</i>	The frontage road system for the 7200 West Freeway Alternative would require a strip take from this historic property. However, the historic building would remain and would not be used. The large trees along the western property boundary would not be affected, and the historic setting and feeling of this house would remain.
3372 S. 7200 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 7200 West alignment would directly use and adversely affect this historic property because the alignment requires removal of the historic resource. All of the historic elements that make this property eligible for the NRHP would be removed as a result of the alternative.
7372 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
7339 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
7329 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
7319 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
7015 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
6921 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
6891 W. 3500 S.	No effect	No use	No impact/use; no further Section 4(f) analysis is required.
3551 S. 7200 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 7200 West alignment would directly use and adversely affect this historic property because the alignment would require removal of the historic resource. All of the historic elements that make this property eligible for the NRHP would be removed as a result of the 7200 West Freeway Alternative.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
3641 S. 7200 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 7200 West alignment would directly use and adversely affect this historic property because the alignment would require removal of the historic resource. All of the historic elements that make this property eligible for the NRHP would be removed as a result of the alternative.
3717 S. 7200 W.	Adverse effect	Direct use; not <i>de minimis</i>	The 7200 West alignment would directly use and adversely affect this historic property because the alignment would require removal of the historic resource. All of the historic elements that make this property eligible for the NRHP would be removed as a result of the alternative.
Utah and Salt Lake Canal (42SL295)	No adverse effect	Direct use; <i>de minimis</i>	The 7200 West mainline alignment and the improvements to 7200 West (frontage road system) would cross over this historic canal. This alternative would affect about 400 linear feet.
D&RGW Railroad Garfield Branch (42SL333)	No adverse effect	Direct use; <i>de minimis</i>	The 7200 West mainline alignment would cross over this railroad track by bridge. The railroad grade and tracks would be spanned by the mainline. The 7200 West frontage road would also cross these tracks in the same location. None of the historic elements would be affected by these crossings.
Bingham and Garfield Railroad (42SL384)	No adverse effect	Direct use; <i>de minimis</i>	The MVC alignment would cross over these historic railroad tracks and grade at about 7000 South. Also, an interchange at 6200 South would require an at-grade crossing.
D&RGW Railroad Bingham Branch (42SL333)	No adverse effect	Direct use; <i>de minimis</i>	The MVC alignment would cross over this railroad track and grade with a bridge. The track and grade would be completely spanned by the MVC alignment.

The historic properties that have a *de minimis* Section 4(f) use do not require further analysis for Section 4(f). However, those resources that involve a direct use and would be adversely affected require an avoidance analysis and measures to minimize harm; these are discussed in Section 28.5, Avoidance Analysis.

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28.4.1.2 Public Parks and Recreation Areas

5600 West Transit Alternative

A summary of impacts to parks and recreation areas for the 5600 West Transit Alternative is presented in Table 28.4-5. The uses at affected parks and recreation areas are all *de minimis* Section 4(f) uses.

Table 28.4-5. Summary of Section 4(f) Uses of Public Parks and Recreation Areas from the 5600 West Transit Alternative

Section 4(f) Type of Use	Transit Option	
	Dedicated Right-of-Way	Mixed-Traffic
Direct use; <i>de minimis</i>	2	2
Direct use; not <i>de minimis</i>	0	0
For more information, see Section 28.1.3, <i>De Minimis</i> Impacts.		

Table 28.4-6 below describes the Section 4(f) use to planned and existing parks and recreation areas in Salt Lake County for the 5600 West Transit Alternative.

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Table 28.4-6. Description of Uses of Public Parks and Recreation Areas from the 5600 West Transit Alternative

Parks and Recreation Areas	Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
Wingpointe Golf Course	No use	No use	The transit alternative would not use or affect this golf course.	
Lee Kay Center for Hunter Education	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	<p>This alternative would require about 1.2 acres of right-of-way along the eastern edge of the Lee Kay Center for Hunter Education property, which is 1,253 acres in size. The alternative would not alter the overall use of this facility (see Figure 28-20, Impacts to Lee Kay Center for Hunter Education).</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. The Utah Division of Wildlife Resources has not yet concurred with the <i>de minimis</i> finding; coordination is ongoing. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>	<p>This alternative would require about 3.0 acres of right-of-way along the extreme edge of the Lee Kay Center for Hunter Education property, which is 1,253 acres in size. The impacts would not alter the overall use of this facility (see Figure 28-20).</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. The Utah Division of Wildlife Resources has not yet concurred with the <i>de minimis</i> finding; coordination is ongoing. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>
Centennial Park	Direct use; <i>de minimis</i>	Direct use; <i>de minimis</i>	<p>This alternative would affect less than 0.1 acre of the northwestern corner of this 77-acre park. None of the facilities would be altered or affected.</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. The Mountain View Corridor team has met with West Valley City Parks and Recreation regarding the impact to this park. They have received a letter requesting a <i>de minimis</i> finding; they have not yet responded in writing. They agreed in the meeting that the impacts are minor. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>	<p>This alternative would affect about 0.3 acre along the western edge of this 77-acre park. None of the facilities would be altered or affected.</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. The Mountain View Corridor team has met with West Valley City Parks and Recreation regarding the impact to this park. They have received a letter requesting a <i>de minimis</i> finding; they have not yet responded in writing. They agreed in the meeting that the impacts are minor. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>

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Parks and Recreation Areas	Section 4(f) Type of Use		Description of Use	
	Dedicated Right-of-Way	Mixed-Traffic	Dedicated Right-of-Way	Mixed-Traffic
West Ridge Golf Course	No use	No use	The transit alternative would not use or affect this golf course.	

5800 West Freeway and 7200 West Freeway Alternatives

The impacts to public parks and recreation resources for the 5800 West Freeway and the 7200 West Freeway Alternatives are summarized in Table 28.4-7. The uses at affected recreation resources are all *de minimis*.

Table 28.4-7. Summary of Section 4(f) Uses of Public Parks and Recreation Areas from the Salt Lake County Freeway Alternatives

Section 4(f) Type of Use	Alternative	
	5800 West Freeway	7200 West Freeway
Direct use; <i>de minimis</i>	4	1
Joint development ^a (no use)	1	1
Direct use; not <i>de minimis</i>	0	0

^a The FHWA Section 4(f) Policy Paper, dated March 2005, states that, when a public park, recreation area, or wildlife or waterfowl refuge is established and an area within the Section 4(f) resource is reserved for highway use prior to, or at the same time as, the 4(f) resource was established, the requirements of Section 4(f) do not apply (joint development). This is because the land used for the highway project was reserved from, and therefore has never been part of, the Section 4(f) area. Also note that there would not be a constructive use (23 CFR 771.135(p)(5)(v)) of the 4(f) resource since it was jointly planned with the highway project.

Table 28.4-8 below describes the Section 4(f) use or impacts to planned and existing public parks and recreation areas for the Salt Lake County freeway alternatives. These impacts are identical for the tolled options, since the right-of-way footprint for the tolling options is the same as for the non-tolling options.

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Table 28.4-8. Description of Uses of Public Parks and Recreation Areas from the Salt Lake County Freeway Alternatives

Parks and Recreation Areas	Section 4(f) Type of Use	Description of Use
<i>5800 West Freeway Alternative</i>		
Lee Kay Center for Hunter Education	Direct use; <i>de minimis</i>	<p>The 5800 West Freeway Alternative would bisect the eastern side of the Lee Kay Center for Hunter Education. An interchange is planned at 1300 South and 5800 West. This alternative would directly affect the 1,253-acre Center and require 71.3 acres of the Center's property (about 6% of the area) for the roadway. Also, access to the Center would be relocated (see Figure 28-20, Impacts to Lee Kay Center for Hunter Education). In addition, the relocated utility corridor would require 8.9 acres of the Center's property, and a detention pond would require 1.9 acres of the Center's property. The impacts from the utility corridor and the detention pond would not affect this recreation resource.</p> <p>The 5800 West Freeway Alternative would not require taking any of the buildings or amenities that are currently within the Lee Kay Center for Hunter Education. None of the functions at this facility would be altered or removed by the 5800 West Freeway Alternative. The area that would be affected is an open field that is occasionally used by dog owners for dog-trial training. Impacts to the Lee Kay Center for Hunter Education are shown in Figure 28-20. The primary dog-trial training area is in the upper center of the property and would not be affected by this alternative. None of the structures or shooting ranges would be affected or used by the 5800 West Freeway Alternative.</p> <p>The 5800 West Freeway Alternative would not alter or adversely affect the intended functions and uses at the Lee Kay Center for Hunter Education. The open field on the eastern edge of the property would be used for this alternative. This open area is occasionally used for dog-trial training; however, other locations at the Center have been designated as the primary dog-trial training area, as shown in Figure 28-20. Locating the 5800 West Freeway Alternative in this open field would not preclude the continued use of the shooting ranges; they are separated by an earthen berm from the open field. FHWA is proposing a finding that the 5800 West Freeway Alternative would have a <i>de minimis</i> impact to this facility; therefore, no avoidance analysis has been conducted for the Lee Kay Center for Hunter Education.</p> <p>Officials at the Utah Division of Wildlife Resources have not yet agreed that these impacts to the Lee Kay Center for Hunter Education result in a <i>de minimis</i> finding. UDOT and FHWA are in coordination with the Division of Wildlife Resources. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>
Hunter Park	Direct use; <i>de minimis</i>	<p>The 5800 West Freeway Alternative would affect a portion of the park owned by Rocky Mountain Power (not the portion owned by Salt Lake County Parks and Recreation; see Figure 28-12, Hunter Park Property Ownership). The use at Hunter Park is a grass area under the power lines as shown in Figure 28-18, Impacts to Hunter Park and Section 4(f) Resources. None of the county facilities or park amenities are within the area that would be affected by the 5800 West Freeway Alternative. The 5800 West Freeway Alternative would use about 4.7 acres of this property for right-of-way, fill slopes, and a southbound on ramp for an interchange with 3500 South. The total acreage for Hunter Park is 29 acres. The alignment would encroach no more than 65 feet into the grassy, open area under the power corridor. None of the park's amenities, ball fields, soccer fields, or other structures would be used by the 5800 West Freeway Alternative.</p>

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Parks and Recreation Areas	Section 4(f) Type of Use	Description of Use
Hunter Park (continued)		FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. Salt Lake County Parks and Recreation has received a letter and figures describing <i>de minimis</i> and the impacts to this park. They have not yet responded; UDOT and FHWA are currently coordinating with Salt Lake County regarding the proposed project. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.
Hunter High School athletic fields	Direct use; <i>de minimis</i>	<p>The 5800 West Freeway Alternative would use a small portion of the soccer fields and softball diamond at Hunter High School. This alternative would use about 0.4 acre (these fields total about 6 acres). The impacts are shown in Figure 28-21, Hunter High School and Hillside Elementary School Impacts. A retaining wall would be used to minimize impacts to these fields. The utility corridor, including the high-voltage electrical lines, would be relocated over both the soccer field and softball diamond. However, the utility relocation would not affect or alter the uses for the Hunter High School athletic fields.</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. The authority with jurisdiction (Granite School District) has not yet agreed that the impacts are <i>de minimis</i>. The Mountain View Corridor team has met with the Granite School District on numerous occasions. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>
Hillside Elementary School athletic fields	Direct use; <i>de minimis</i>	<p>The 5800 West Freeway Alternative would use about 2.2 acres of the 5.8-acre athletic field. The use is at the eastern portion of the field. This use is about 38% of the athletic field. The informal baseball diamond is located in the southwestern corner of the field and would not be affected by this alternative (depending on the size of the outfield). The baseball diamond would still remain functional regardless of these impacts.</p> <p>The eastern portion of the soccer field would be used by this alternative. The soccer field could be shifted to the west and still remain functional.</p> <p>To mitigate the impacts to the Hillside Elementary School athletic fields, a replacement field would be constructed directly north of the existing field. This new field would be replaced with the baseball diamond and soccer field that would be affected by the 5800 West Freeway Alternative. The new athletic field is shown in Figure 28-21.</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. The authority with jurisdiction (Granite School District) has not yet agreed that the impacts are <i>de minimis</i>. The Mountain View Corridor team has met with the Granite School District on numerous occasions. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>
West Ridge Golf Course	No use	The 5800 West Freeway Alternative passes about 300 feet west of this golf course, and the 5800 West Freeway Alternative is about 1,000 feet west. There would be no permanent use, temporary use, or constructive use of the West Ridge Golf Course from the 5800 West Freeway or 7200 West Freeway Alternatives. No further Section 4(f) analysis is required.
Ron Wood Wash Baseball Complex	No use	The Mountain View Corridor passes about 400 feet to the west of this baseball complex. This baseball complex is not an area where quiet and serenity is required or where these attributes are a part of its functionality and purpose. There would be no permanent use, temporary use, or constructive use of the Ron Wood Wash Baseball Complex. No further Section 4(f) analysis is required.

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Parks and Recreation Areas	Section 4(f) Type of Use	Description of Use
Western Springs Park	No use; joint development	<p>During the MVC alternative development process, both Riverton City and Salt Lake County Parks and Recreation were contacted regarding park plans. A meeting was held with Salt Lake County on October 19, 2004, to review the MVC project and determine if the park and the MVC could be jointly developed. Based on discussions during the meeting, both UDOT and Salt Lake County determined that the park and the proposed MVC project could be developed without affecting the amenities planned for the park. UDOT minimized the right-of-way requirements in the area of Western Springs Park by using retaining walls and provided highway designs to Salt Lake County Parks and Recreation. After receiving the MVC plans, the County determined that the park plans could be implemented while reserving right-of-way for the planned MVC.</p> <p>Appendix 28D, Western Springs Park Correspondence (Joint Use Letters), provides the concurrence letters from Salt Lake County Parks and Recreation and Riverton City. In addition to coordinating with the County, a meeting was held with Riverton City on December 7, 2004, to discuss park plans and the ongoing coordination with the County. Riverton City stated that, if the overall amenities of the park would not be affected and the County had jointly developed the plans with UDOT, it would concur with reserving right-of-way for the MVC in the park plans. The concurrence letter from Riverton City is provided in Appendix 28D.</p> <p>Because Western Springs Park was planned to reserve the right-of-way of the MVC (joint development as defined by question 16 in the FHWA Section 4(f) Policy Paper), the requirements of Section 4(f) do not apply; therefore, Western Springs Park is not carried forward in this Section 4(f) analysis.</p>
Monarch Meadows Park	No use	The MVC alignment in this location completely avoids using any property from this park. There would be no permanent use, temporary use, or constructive use at this park. No further Section 4(f) analysis is required.
Foothill Park	No use	The MVC in this location completely avoids using any property from this park. There would be no permanent use, temporary use, or constructive use at this park. No further Section 4(f) analysis is required.
<i>7200 West Freeway Alternative</i>		
Lee Kay Center for Hunter Education	Direct use; <i>de minimis</i>	<p>The 7200 West Alternative would require about 1.6 acres of this 1,253-acre recreation area. An interchange is planned at 1300 South, and the footprint would use a small portion along its northwestern boundary. None of the amenities would be affected (see Figure 28-20, Impacts to Lee Kay Center for Hunter Education).</p> <p>FHWA is proposing a finding of <i>de minimis</i> impact from this alternative. Officials at the Utah Division of Wildlife Resources have not yet agreed that these impacts to the Lee Kay Center for Hunter Education result in a <i>de minimis</i> finding. UDOT and FHWA are in coordination with the Division of Wildlife Resources. If concurrence with the <i>de minimis</i> finding is not obtained, a complete Section 4(f) analysis will be conducted.</p>
Falcon Crest Park	No use	The 7200 West alignment completely avoids the property for this planned park. There would be no constructive-use or direct impacts to this planned park. No further Section 4(f) analysis is required.

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Parks and Recreation Areas	Section 4(f) Type of Use	Description of Use
West Ridge Golf Course		See discussion above under the 5800 West Freeway Alternative.
Ron Wood Wash Baseball Complex		See discussion above under the 5800 West Freeway Alternative.
Western Springs Park		See discussion above under the 5800 West Freeway Alternative.
Monarch Meadows Park		See discussion above under the 5800 West Freeway Alternative.
Foothill Park		See discussion above under the 5800 West Freeway Alternative.

28.4.2 Use of Section 4(f) Resources by the Utah County Alternatives

28.4.2.1 Historic Resources

Table 28.4-9 summarizes the use of historic resources in the Utah County impact analysis area by alternative. In addition to the geographic alternatives, tolling options for each alternative are being considered and analyzed. The right-of-way footprint for each tolling option is the same as for the associated non-tolling option; however, the number of lanes for the tolling options is generally reduced by one lane in each direction due to less travel demand.

Table 28.4-9. Summary of Section 4(f) Uses of Historic Resources from the Utah County Alternatives

Section 4(f) Type of Use	Section 106 Type of Effect	Alternative		
		Southern Freeway	2100 North Freeway	Arterials
Direct use; <i>de minimis</i>	No adverse effect	4	6	14
Direct use; not <i>de minimis</i>	Adverse effect	2	4	5

Table 28.4-10 below is a description of the impacts to historic resources by alternative; impacts to all alternatives in Utah County are shown in Figure 28-22, Impacts to Historic Houses in Utah County. These impacts are identical for the tolled options; the right-of-way footprint for the tolled options is the same as for the non-tolled options.

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Table 28.4-10. Description of Uses of Historic Resources from the Utah County Alternatives

Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
<i>Southern Freeway Alternative</i>			
Provo Reservoir Canal/Murdock Ditch (42SL287 and 42UT947)	Adverse effect	Direct use; not <i>de minimis</i>	<p>A total of 4,400 linear feet of this canal would be used as a result of the Southern Freeway Alternative. This impact is considered a direct use or permanent use (not <i>de minimis</i>); avoidance analysis is required. This canal would be adversely affected as defined by Section 106.</p> <p>This canal would cross under the Southern Freeway in two locations: Segments 1 and 3.</p> <ul style="list-style-type: none"> • Segment 1 is located in Bluffdale. The Southern Freeway Alternative would affect about 4,100 feet of the canal. • Segment 3 is located in Saratoga Springs just north of SR 73. This alternative would affect about 300 linear feet of the canal at this location.
Salt Lake and Western Railroad (42UT948)	No adverse effect	Direct use; <i>de minimis</i>	The Southern Freeway Alternative would affect Segment 1. It would affect less than 100 linear feet of this historic railroad grade. The historic integrity of the grade would not be altered.
Utah Lake Distributing Canal (42UT946 and 42SL287)	No adverse effect	Direct use; <i>de minimis</i>	The Southern Freeway Alternative would affect Segment 3 of this canal. It would affect less than 300 linear feet of the canal. The historic integrity of the Utah Lake Distributing Canal would not be altered.
Gardner Canal (42UT944)	No adverse effect	Direct use; <i>de minimis</i>	The Southern Freeway Alternative would affect Segment 2. It would affect about 300 linear feet. The historic integrity of the Gardner Canal would not be altered.
Denver and Rio Grande Railroad (42SL293 and 42UT1125)	No adverse effect	Direct use; <i>de minimis</i>	The Southern Freeway Alternative would span these historic railroad tracks with a new bridge at Segment 3. The historic integrity of the Denver and Rio Grande Railroad would not be altered.
7364 N. 9550 W., Lehi	Adverse effect	Direct use; not <i>de minimis</i>	The Southern Freeway Alternative would directly use and adversely affect this historic house. An interchange is proposed at 9550 West with the Southern Freeway. The interchange and the Mountain View Corridor would require the removal of this historic house.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
<i>2100 North Freeway Alternative</i>			
Provo Reservoir Canal/Murdock Ditch (42SL287 and 42UT947)	Adverse effect	Direct use; not <i>de minimis</i>	<p>A total of 4,800 feet of this canal would be affected by the 2100 North Freeway Alternative. This would result in a direct use or permanent use as defined by Section 4(f). This alternative would adversely affect this historic canal as defined by Section 106.</p> <p>The 2100 North Freeway Alternative would cross this historic canal at three locations.</p> <ul style="list-style-type: none"> • Segment 1 – The 2100 North Freeway Alternative would affect about 4,100 linear feet of the canal at this location. • Segment 2 – The 2100 North Freeway Alternative would affect about 400 linear feet of the canal at this location. • Segment 3 – This alternative would affect about 300 linear feet of the canal at this location.
Salt Lake and Western Railroad (42UT948)	No adverse effect	Direct use; <i>de minimis</i>	<p>The 2100 North Freeway Alternative would cross both segments of this historic railroad grade.</p> <ul style="list-style-type: none"> • Segment 1 – The 2100 North Freeway Alternative would affect less than 100 linear feet at this location. • Segment 2 – This alternative would affect about 650 linear feet at 2100 North in Lehi. <p>The 2100 North Freeway Alternative would affect about 750 linear feet of this historic railroad grade. The historic integrity of the grade would not be altered.</p>
Utah Lake Distributing Canal (42UT946 and 42SL287)	No adverse effect	Direct use; <i>de minimis</i>	<p>The 2100 North Freeway Alternative would cross Segment 2 at 2100 North. It would affect less than 600 linear feet. The historic integrity of the canal would not be altered.</p>
Gardner Canal (42UT944)	No adverse effect	Direct use; <i>de minimis</i>	<p>The 2100 North Freeway Alternative would cross Segment 1. This alternative would affect less than 600 linear feet at 2100 North. The historic integrity of the canal would not be altered.</p>
Denver and Rio Grande Railroad (42SL293 and 42UT1125)	No adverse effect	Direct use; <i>de minimis</i>	<p>The 2100 North Freeway Alternative would span these historic railroad tracks with a new bridge at 2100 North. The historic integrity of the Denver and Rio Grande Railroad would not be altered.</p>
1025 W. State Street, Lehi	No adverse effect	Direct use; <i>de minimis</i>	<p>The 2100 North Freeway Alternative and the realigned US 89 would have minor impacts to this property. Less than 0.1 acre of property would be used along the southern property line. The historic integrity of this structure would not be altered.</p>
1020 W. State Street, Lehi	Adverse effect	Direct use; not <i>de minimis</i>	<p>The 2100 North Freeway Alternative would directly use and adversely affect this historic house. A freeway-to-freeway interchange at I-15 would be constructed, which would require removal of this house.</p>

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
1060 W. State Street, Lehi	Adverse effect	Direct use; not <i>de minimis</i>	The 2100 North Freeway Alternative would directly use and adversely affect this historic house. A freeway-to-freeway interchange at I-15 would be constructed, which would require removal of this house.
959 W. 2100 N., Lehi	Adverse effect	Direct use; not <i>de minimis</i>	The 2100 North Freeway Alternative would directly use and adversely affect this historic house. The off ramp for northbound I-15 would require the removal this house.
951 W. 2100 N., Lehi	No adverse effect	Direct use; <i>de minimis</i>	The 2100 North Freeway Alternative and its connection to I-15 would directly use about 0.3 acre of the southern portion of this historic property. The historic integrity of this structure would not be altered.

Arterials Alternative

Provo Reservoir Canal/Murdock Ditch (42SL287 and 42UT947)	Adverse effect	Direct use; not <i>de minimis</i>	<p>A total of 4,600 linear feet of this canal would be affected by this alternative. These impacts would result in a direct use or permanent use as defined by Section 4(f). This alternative would adversely affect this historic canal as defined by Section 106.</p> <p>The Arterials Alternative would cross this historic canal at three locations.</p> <ul style="list-style-type: none"> • Segment 1 – This alternative would affect about 4,100 linear feet of the canal at this location. • Segment 2 – The Arterials Alternative would affect about 200 linear feet of the canal at this location. • Segment 3 – This alternative would affect about 300 feet of this canal at this location.
Salt Lake and Western Railroad (42UT948)	No adverse effect	Direct use; <i>de minimis</i>	<p>The Arterials Alternative would cross this historic railroad grade at both segments.</p> <ul style="list-style-type: none"> • Segment 1 – This alternative would affect less than 100 linear feet at this location. • Segment 2 – The Arterials Alternative would affect less than 500 linear feet at this location. <p>The Arterials Alternative would affect about 600 linear feet of this historic railroad grade. The historical integrity of the grade would not be altered.</p>
Salt Lake and Utah Railroad (42SL510)	No adverse effect	Direct use; <i>de minimis</i>	Porter Rockwell Boulevard would cross over this railroad grade; it would affect less than 250 linear feet. The historic integrity of the Salt Lake and Utah Railroad would not be altered.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
Utah Lake Distributing Canal (42UT946 and 42SL287)	No adverse effect	Direct use; <i>de minimis</i>	<p>The Arterials Alternative would cross this historic canal at Segments 1 and 2.</p> <ul style="list-style-type: none"> Segment 1 – Porter Rockwell Boulevard would cross over this canal. It would affect about 240 linear feet at this location. Segment 2 – The 2100 North arterial would affect less than 150 linear feet of this canal. <p>About 390 linear feet of this canal would be affected by the Arterials Alternative. Its historic integrity would not be altered.</p>
Utah and Salt Lake Canal (42SL295)	No adverse effect	Direct use; <i>de minimis</i>	Porter Rockwell Boulevard would cross over this canal on a bridge that would be about 200 feet long. Its historic integrity would not be altered.
Denver and Rio Grande Railroad (42SL293 and 42UT1125)	No adverse effect	Direct use; <i>de minimis</i>	<p>The Arterials Alternative would cross over three segments of these historic railroad tracks.</p> <ul style="list-style-type: none"> Segment 1 – Porter Rockwell Boulevard would cross over these railroad tracks on a bridge. Segment 2 – This alternative would cross under the railroad tracks at the 2100 North arterial. Segment 3 – The 1900 South alternative would cross over this segment with a bridge that is about 115 feet long. <p>Its historic integrity would not be altered.</p>
South Jordan Canal (42SL291)	No adverse effect	Direct use; <i>de minimis</i>	Porter Rockwell Boulevard would cross over this canal on a bridge about 700 feet long. Its historic integrity would not be altered.
Jordan and Salt Lake City Canal (42SL214)	No adverse effect	Direct use; <i>de minimis</i>	Porter Rockwell Boulevard would cross over this canal on a bridge about 700 feet long. Its historic integrity would not be altered.
East Jordan Canal (42SL290)	No adverse effect	Direct use; <i>de minimis</i>	Porter Rockwell Boulevard would cross over this canal on a bridge about 700 feet long. Its historic integrity would not be altered.
Draper Irrigation Canal (42SL350)	Adverse effect	Direct use; not <i>de minimis</i>	Porter Rockwell Boulevard would directly use and adversely affect about 1.5 miles of this canal; this includes the 2,000-foot section that has been piped and the section near the I-15 interchange at 14600 South that has been altered (affected during the construction of I-15). This alternative would adversely affect the Draper Irrigation Canal.
15400 S. Pony Express Road, Bluffdale	Adverse effect	Direct use; not <i>de minimis</i>	Porter Rockwell Boulevard would directly use and adversely affect this historic property. All of the historic structures would be removed as a result of the Porter Rockwell Boulevard alignment.
475 W. 14600 S., Bluffdale	No adverse effect	Direct use; <i>de minimis</i>	Porter Rockwell Boulevard would require 6.9 acres of this historic property for reconstruction of the 14600 South interchange. However, the historic house would not be affected.

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Resource Identification (Name, Address, and/or Site Number)	Section 106 Type of Effect	Section 4(f) Type of Use	Description of Use
Gardner Canal (42UT944)	No adverse effect	Direct use; <i>de minimis</i>	The 2100 North arterial would cross over this historic canal. It would affect less than 400 linear feet.
1025 W. State Street, Lehi	No effect	No use	The 2100 North arterial would not affect this historic property.
1020 W. State Street, Lehi	Adverse effect	Direct use; not <i>de minimis</i>	The 2100 North arterial interchange with I-15 would directly use and adversely affect this historic house. The historic features and resources at this location would be removed by this alternative.
1060 W. State Street, Lehi	Adverse effect	Direct use; not <i>de minimis</i>	The 2100 North arterial interchange with I-15 would directly use and adversely affect this historic house. The historic features and resources at this location would be removed by this alternative.
959 W. 2100 N., Lehi	No adverse effect	Direct use; <i>de minimis</i>	The 2100 North arterial would use a small portion of this property's southwestern property boundary. The historic building would not be affected.
951 W. 2100 N., Lehi	No effect	No use	The 2100 North arterial and its connection to I-15 would not affect this historic property.
7364 N. 9550 W., Lehi	No adverse effect	Direct use; <i>de minimis</i>	The 1900 South arterial would affect a strip of this historic property. This alternative would require about 0.2 acre of property from this historic house. However, access would be maintained, and the historic house would not be affected.

28.4.2.2 Public Parks and Recreation Areas

Table 28.4-11 summarizes the impacts to public parks and recreation areas in the Utah County impact analysis area.

Table 28.4-11. Summary of Section 4(f) Uses of Public Parks and Recreation Areas from the Utah County Alternatives

Section 4(f) Type of Use	Alternative		
	Southern Freeway	2100 North Freeway	Arterials
Direct use; <i>de minimis</i>	2	1	1 ^a
Direct use; not <i>de minimis</i>	1	0	0

^a The Jordan River Parkway Trail is crossed three times by the Arterials Alternative: two in Utah County where the parkway currently exists and one in Salt Lake County by Porter Rockwell Boulevard where it is planned. However, the *de minimis* finding for the Jordan River Parkway Trail is counted only once for the Arterials Alternative.

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Table 28.4-12 summarizes the impacts to public parks and recreation areas by alternative in Utah County. These impacts are identical for the tolled options; the right-of-way footprint for the tolled options is the same as for the non-tolled options.

Table 28.4-12. Description of Uses of Public Parks and Recreation Areas from the Utah County Alternatives

Parks and Recreation Areas	Section 4(f) Type of Use	Description of Use
<i>Southern Freeway Alternative</i>		
Jordan River Parkway Trail	Direct use; <i>de minimis</i>	<p>The Southern Freeway Alternative would cross over the Jordan River on a bridge. The existing Jordan River Parkway Trail at this location is about 400 feet east of the Jordan River. About 1,500 feet of the Jordan River Parkway Trail would be realigned to cross under the proposed bridge. The total length of the Jordan River Parkway in Utah County is about 9 miles. However, the continuity and use of this parkway would not be altered. The impacts result in a minor use or <i>de minimis</i> impact at this location. The impacts to the Jordan River Parkway Trail are shown in Figure 28-23, Impacts to Public Parks and Recreation Areas in Utah County. Since there is a use of the Jordan River Parkway Trail (<i>de minimis</i>), a constructive-use impact does not apply.</p> <p>The Mountain View Corridor team has met with Utah County Public Works on several occasions regarding the project and its use of the Jordan River Parkway Trail. Utah County Public Works has responded to UDOT's request for a finding of <i>de minimis</i> use for this crossing and the others by the Utah County alternatives. A letter from the County is included in Appendix 28F, which documents the <i>de minimis</i> use.</p>
Northlake Park	Direct use; not <i>de minimis</i>	An access road to the development west of the park (Loch Lomond subdivision) would be constructed as part of the Southern Freeway Alternative. This access road would require about 1.9 acres of Northlake Park, which results in a direct use. The total acreage of this park is 28 acres. None of the park's amenities would be affected; however, Lehi City considers this a direct use (not <i>de minimis</i>). Impacts to Northlake Park are shown in Figure 28-23.
<i>2100 North Freeway Alternative</i>		
Jordan River Parkway Trail	Direct use; <i>de minimis</i>	<p>The 2100 North Freeway Alternative would cross over the Jordan River on a bridge that is about 200 feet long. The road would be constructed below the existing approaches to the Jordan River to minimize impacts from noise and to better match the existing topography. A bridge over 2100 North would be constructed to accommodate the Jordan River Parkway Trail. The continuity and use of this parkway would not be altered. Impacts to the Jordan River Parkway Trail are shown in Figure 28-23. This is a direct impact; a constructive-use impact does not apply to the Jordan River Parkway Trail.</p> <p>See the discussion above under the Southern Freeway Alternative for the finding of <i>de minimis</i> use and Utah County Public Works correspondence.</p>
Pointe Meadow Park	No use	This alternative does not use any portion of this park. No further Section 4(f) analysis is required.

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Parks and Recreation Areas	Section 4(f) Type of Use	Description of Use
<i>Arterials Alternative</i>		
Jordan River Parkway Trail	Direct use; <i>de minimis</i>	<p>This alternative would cross the Jordan River Parkway Trail in three locations.</p> <ul style="list-style-type: none"> Porter Rockwell Boulevard would cross a planned section of this parkway on a 700-foot-long bridge. No impact is anticipated at this location. The 2100 North arterial would cross this existing section of the parkway on a bridge. No impacts are anticipated at this location. The 1900 South arterial would cross over the Jordan River on a bridge. The Jordan River Parkway Trail at this location is about 400 feet east of the river. About 1,500 feet of the Jordan River Parkway Trail would need to be relocated to the banks of the Jordan River in order to cross 1900 South under the bridge. <p>The Arterials Alternative would not adversely affect the Jordan River Parkway Trail. The impacts result in a direct use that is considered <i>de minimis</i>. Impacts to the Jordan River Parkway Trail are shown in Figure 28-23. No constructive use would occur at this location.</p> <p>See the discussion above under the Southern Freeway Alternative for the finding of <i>de minimis</i> use and Utah County Public Works correspondence. However, no correspondence regarding <i>de minimis</i> use has been received from Salt Lake County Parks and Recreation (Porter Rockwell Boulevard crossing).</p>
Pointe Meadow Park	No use	This alternative does not use this park. No further Section 4(f) analysis is required.
Northlake Park	No use	This alternative would avoid using this park. No impacts would occur from the Arterials Alternative at Northlake Park.

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28.5 Avoidance Analysis

This section discusses the required evaluation to determine whether there is a feasible and prudent alternative to the use of Section 4(f) resources. An avoidance analysis is not required when a finding of *de minimis* impact is made for Section 4(f) resources.

28.5.1 No-Action Alternative

The No-Action Alternative was considered as an alternative for avoiding the use of Section 4(f) resources in both Salt Lake and Utah Counties. The No-Action Alternative does not meet the project's purpose as documented in Chapter 2, Alternatives, of this EIS and summarized earlier in this chapter. For this reason, the No-Action Alternative is not prudent and is not considered a viable avoidance alternative.

28.5.2 Salt Lake County Avoidance Alternatives

This section discusses avoidance alternatives considered in the Salt Lake County impact analysis area for the resources that would be adversely affected. Location/mode alternatives are described first, followed by alternatives considered for each resource.

28.5.2.1 Location/Mode Alternatives in the Salt Lake County Impact Analysis Area

Location alternatives are alignments on parallel or similar corridors that avoid affecting Section 4(f) resources along the 5800 West Freeway or 7200 West Freeway Alternatives. The Salt Lake County location alternatives are shown in Figure 28-24, Location Alternatives in Salt Lake County. These alternatives are global avoidance alternatives that apply to either 5800 West or 7200 West.

An *Alternatives Screening Report* (Parsons Brinckerhoff 2004) and an *Alternatives Screening Report Addendum* (HDR 2007) were prepared for the Mountain View Corridor. The analysis in this chapter is based on the two screening reports. The *Alternatives Screening Report* and *Alternatives Screening Report Addendum* describe the screening process for eliminating alternatives. Location alternatives considered for this Section 4(f) analysis are summarized from these reports. Also summarized in the *Alternatives Screening Report* are the other studies conducted within the MVC study area:

- Western Transportation Corridor Study
- North Valley Connectors Study (Utah County)
- Inter-Regional Corridor Alternative Analysis



The location alternatives (roadway concepts) considered for Salt Lake County are described in the following sections.

Construct a North-South Freeway along SR 111

SR 111, in western Salt Lake County, was evaluated as an avoidance alternative. This north-south route begins at SR 201 on the north and terminates at about 12600 South in Riverton. An alternative was evaluated to extend SR 111 from I-80 to about 5400 South (Parsons Brinckerhoff 2005).

A freeway on SR 111 was eliminated from consideration for the following reasons:

- The travel model sensitivity analysis that was conducted during the screening process showed that a major facility on SR 111 would have limited use compared to a facility that was more geographically centered in the MVC study area and therefore would not improve regional mobility. In addition, the principles from the Growth Choices process (see Chapter 3, Growth Choices) that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems
- The preliminary traffic analysis also showed that SR 111 is too far west to meet north-south travel demand. Model runs for the analysis found that motorists would not travel that far west to go north-south. Therefore, this alternative would not meet the project purpose of improving regional mobility.
- The spacing analysis completed in the *Western Transportation Corridor Study* using the guidelines in the *Highway Capacity Manual* (Transportation Research Board 2000) also supported eliminating this alternative. The SR 111 freeway was too far west. A corridor was needed farther east to alleviate the anticipated traffic volumes. This alternative was eliminated for the reasons listed in the bullet above.
- SR 111 extends through portions of historic downtown Magna with 170 historic buildings that are considered Section 4(f) resources, which could be affected (Parsons Brinckerhoff 2005).
- This alternative would not provide a direct connection into Utah County. This connection is needed to provide necessary capacity between Salt Lake and Utah Counties.



Based on these factors, FHWA concluded that a freeway along SR 111 is not a prudent alternative for avoiding or minimizing harm to the Section 4(f) resources that would be affected by the Salt Lake County alternatives. Therefore, this alternative is not considered further.

Convert Bangerter Highway to a Freeway

This avoidance alternative would convert the existing Bangerter Highway (which has at-grade intersections) to a freeway with grade-separated interchanges. Bangerter Highway begins at I-80 near the Salt Lake City International Airport and connects to I-15 at about 13800 South in Draper. Bangerter Highway is the eastern boundary of the MVC study area through most of the Salt Lake Valley.

Converting Bangerter Highway to a freeway was eliminated from consideration for the following reasons:

- Converting Bangerter Highway to a freeway alternative does not meet the project purpose of improving regional mobility in the MVC study area. This alternative does not resolve traffic congestion issues to the west within the MVC study area, and it is too far east to meet the north-south needs of the traveling public.
- The spacing analysis completed in the *Western Transportation Corridor Study* using the guidelines in the *Highway Capacity Manual* also supported eliminating this alternative. Converting Bangerter Highway to a freeway alternative was eliminated because it is too far east to meet the north-south needs of the traveling public.
- As explained in the *Alternatives Screening Report*, this alternative is not feasible or practical because the impacts to environmental resources are too great. This alternative would require more than 400 relocations,⁴ significantly more than either the 7200 West Freeway Alternative or the 5800 West Freeway Alternative. The Bangerter Highway corridor is mostly developed on both the east and west sides, particularly from 2400 South to 10400 South in South Jordan.

⁴ This analysis considered that the first row of structures on either the east or west side of Bangerter Highway would require relocation. This analysis did not consider the wider footprint needed for grade-separated interchanges and did not distinguish between residential and business properties.



- A freeway along Bangerter Highway does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems
- Bangerter Highway does not extend into Utah County; it connects to I-15 in Draper at about 13800 South. The Mountain View Corridor is needed in both Salt Lake and Utah Counties.

Based on these factors, FHWA concluded that converting Bangerter Highway to a freeway is not a prudent alternative for avoiding or minimizing harm to the Section 4(f) resources that would be affected by the Salt Lake County alternatives. Therefore, this alternative is not considered further.

Widen Existing North-South Arterials (No Freeway)

This avoidance alternative includes improving and widening north-south arterials including 4800 West, 5600 West, 6400 West, 7200 West, and 8400 West.

However, this alternative was eliminated from consideration as not prudent for the following reasons:

- Improving arterials within the MVC study area does not meet the project purpose of improving regional mobility in the MVC study area. This alternative does not resolve traffic congestion issues within the MVC study area.
- Improving north-south arterials without providing a new north-south freeway does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. While this alternative would increase regional mobility, it would not substantially increase the needed capacity to the level that the MVC Salt Lake County alternatives would.

Based on these factors, FHWA concluded that widening north-south arterials with no Mountain View Corridor is not a prudent alternative for avoiding or minimizing harm to the Section 4(f) resources that would be affected by the Salt Lake County alternatives. Therefore, this alternative is not considered further.



Convert Redwood Road to a Freeway

Redwood Road (SR 68) is located at about 1700 West in Salt Lake County. It is the only other connection between Salt Lake and Utah Counties other than I-15 and its associated frontage roads. Redwood Road crosses into northern Utah County near Camp Williams.

Converting Redwood Road (SR 68) was eliminated from consideration for the following reasons:

- North of Bangerter Highway, Redwood Road is too far east to meet the expected travel demand and would not meet the project purpose of improving regional mobility.
- Improving Redwood Road within the MVC study area does not meet the project purpose. This alternative does not resolve traffic congestion issues within the MVC study area because it does not accommodate the needed capacity for future traffic volumes.
- Converting Redwood Road to a freeway does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems
- The Redwood Road corridor in Salt Lake County and northern Utah County is mainly urbanized. There would be a high number of residential and business relocations compared to the other alternatives. Using an analysis similar to that used for the Convert Bangerter Highway to a Freeway alternative, converting Redwood Road to a freeway would have more relocations. The right-of-way is much smaller on this major arterial compared to Bangerter Highway.
- An increased number of Section 4(f) resources would be affected by converting Redwood Road to a freeway. Based on three recent NEPA documents developed for projects along Redwood Road in Salt Lake County, a total of 122 historic properties (not including publicly owned parks and recreation resources) are located along this corridor (UDOT 2005a, 2005b, 2007). In addition, this alternative would pass through the Riverton historic district, which is listed in the NRHP.

Based on these factors, FHWA concluded that converting Redwood Road to a freeway is not a prudent alternative for avoiding or minimizing harm to the Section 4(f) resources that would be affected by the Salt Lake County alternatives. Therefore, this alternative is not considered further.

Implement Transit Only

Several transit alternatives were considered, including a transit-only alternative. This avoidance alternative would provide additional transit opportunities within the MVC study area. This alternative was eliminated from further consideration for the reasons listed below:

- The Wasatch Front Regional Council concluded that both highway and transit investments are needed in the MVC study area to meet existing and future traffic needs. A transit-only alternative does not provide sufficient capacity to meet the requirements of the project purpose, specifically the need to reduce roadway congestion.
- A transit-only alternative does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems

Although a transit-only alternative has been eliminated, a transit alternative is being considered along 5600 West from the Salt Lake City International Airport to about 13000 South in Herriman as part of the freeway alternatives in Salt Lake County.

The avoidance alternatives described above do not meet the project's purpose, do not add sufficient capacity to alleviate the existing and future traffic need in western Salt Lake County, and are not consistent with the transportation goals defined in the Envision Utah Growth Choices process. Therefore, none of these avoidance alternatives is prudent. In addition, two of these alternatives—SR 111 and Redwood Road—would have greater Section 4(f) impacts than any of the action alternatives. Therefore, even if they were prudent, they would have to be rejected because they do not avoid or minimize impacts to Section 4(f) resources.

28.5.2.2 5800 West Freeway Alternative – Alignment Shifts

Alignment shifts were considered for the resources in Salt Lake County that would be adversely affected. No avoidance alternatives are required for the transit alternative since all the uses are considered *de minimis* under Section 4(f).

Within the area of the Section 4(f) impacts, the 5800 West Freeway Alternative is located within a portion of the Rocky Mountain Power high-voltage electrical transmission corridor, which ranges in width from 160 feet to 300 feet. The utility corridor divides West Valley City, and no development or only limited development is allowed in this corridor. Therefore, if the 5800 West Freeway Alternative were to share and/or be located within the utility corridor, relocations and other environmental and community impacts would be minimized. An alignment that is separated from the utility corridor would add another obstacle, which would further divide West Valley City. This arrangement would result in the new freeway corridor running parallel to the utility corridor with a thin strip of land between the two, which would essentially make that strip undesirable. For these reasons, the 5800 West Freeway Alternative was designed to be within or immediately adjacent to the utility corridor wherever possible.

Context and the Selective Reconnaissance Survey

The 5800 West Freeway Alternative would completely use 11 Section 4(f) historic properties, all of which are located close to Hunter Park, which is on 3500 South at 6000 West (see Figure 28-18, Impacts to Hunter Park and Section 4(f) Resources).

The following historic houses would be completely used by the 5800 West Freeway Alternative:

- 5769 West 3500 South • 5765 West 3500 South • 5755 West 3500 South
- 5742 West 3500 South • 5741 West 3500 South • 5724 West 3500 South
- 5712 West 3500 South • 3525 South 5750 West • 3530 South 5750 West
- 3556 South 5750 West • 3590 South 5750 West

Two of these historic properties, 5741 West 3500 South and 3525 South 5750 West, are located in a historic subdivision called Jonesdale. This historic subdivision was determined by reviewing maps of the area provided by West Valley City and noting that its construction was prior to 1958. The Jonesdale historic subdivision is bounded by Hunter Park on the west, 5600 West on the east, 3500 South on the north, and about 3600 South on the south.

The *Selective Reconnaissance Survey* (UDOT 2004) was conducted as part of the 3500 South Roadway Widening project for UDOT. The purpose of this survey was to document the historic structures (buildings only) in West Valley City and parts of Magna. This report states that a high number of historic houses exist along or near 3500 South in West Valley City, where all of the historic houses would be affected by the 5800 West Freeway Alternative. The study area for the *Selective Reconnaissance Survey* extended from SR 201 on the north to 4100 South on the south and from Redwood Road on the east and 8400 West on the west. Note that not all historic properties within these limits were identified, only those along 3500 South and other major roads.

The *Selective Reconnaissance Survey* identified 20 historic subdivisions⁵ as shown in Figure 28-25, Historic Subdivisions, that include 733 individual potential historic properties (constructed on or before 1958; individual houses in the subdivisions were not documented). Of these, 379 are considered eligible for inclusion in the NRHP, which would make them subject to Section 4(f). A total of 199 historic houses (of the 379) are considered WWII-Era or Post War-type structures, which is almost 53% of the eligible historic buildings in the *Selective Reconnaissance Survey* study area. The vast majority of historic houses in West Valley City and Magna are considered WWII-type structures. Seven of the 11 eligible historic houses that would be affected by the 5800 West Freeway Alternative are considered WWII-Era or Post War-type structures. There are a large number of WWII-Era or Post War-type structures in the western Salt Lake Valley. These structures have not been identified by West Valley City as important structures that help define the area's history. West Valley City has not identified any particular type of structure that is of value for the history of the city.

Since these Section 4(f) resources are grouped together, avoidance alternatives for these resources are discussed together. Alignment shifts to the west and east were considered to avoid these resources. Each is discussed below.

West Alignment Shift through Hunter Park That Completely Avoids Historic Houses (Those Affected by the 5800 West Alignment)

A western alignment shift to avoid the 11 historic houses would adversely affect Hunter Park and it would no longer function as a park (see Figure 28-26, West Alignment Shift A at Hunter Park).

Letters were received from West Valley City and Salt Lake County Parks and Recreation (see Appendix 28C, Hunter Park Information and Correspondence) that oppose this alignment shift into the park. The City places a high value on

⁵ If a subdivision is noted as a historic subdivision in the *Selective Reconnaissance Survey*, this does not mean that all houses in the subdivision are eligible for inclusion in the NRHP.

Hunter Park and feels that it has more cultural significance to their city than the 11 historic properties used by the 5800 West Freeway Alternative. West Valley City stated in its letter that "...of critical importance in this regard is making sure that the project alignment does not materially impair the value or utility of any of the City's irreplaceable assets, including our Hunter Park."

Salt Lake County stated in its letter that it "...strongly advise[s] that the alignment(s) for...the 5800 West Freeway Alternative be shifted away from Hunter Park to avoid any impacts to the park." Further, the County stated that adverse impacts to Hunter Park "would dramatically impair the County's ability to meet the needs of the community in providing ball fields for organized sports programs."

A west alignment shift would use the historic house at 5890 West 3500 South (a Section 4(f) resource); it would not be affected by the proposed 5800 West Freeway Alternative (see Figure 28-8, Hunter Park and Historic Properties). Therefore, a western alignment shift would not completely avoid all Section 4(f) resources in this area.

An alignment shift to the west to completely avoid the 11 historic houses would adversely affect Hunter Park, which is itself a Section 4(f) resource. Hunter Park is a recreation resource that is highly valued by the local and regional communities. By comparison, the historic homes used by the 5800 West Freeway Alternative are examples of a property type—residential structures from the WWII era—that is very common in the project area; there are hundreds of other examples of the same type of historic structure in West Valley City.

In addition, a western alignment shift would adversely affect a recreation area to the south of Hunter Park that is privately owned by the Church of Jesus Christ of Latter-day Saints (LDS Church) (see Figure 28-26, West Alignment Shift A at Hunter Park). This private recreation area contains a soccer field, softball diamond, and a grassy area.

The social and cultural impacts to the community from a western alignment shift that uses Hunter Park would be much greater than the Section 4(f) uses from the 5800 West Freeway Alternative. Therefore, a western alignment shift is not a prudent and feasible alternative for avoiding or minimizing harm to the 11 historic properties along 5800 West.

West Alignment Shift That Avoids Historic Houses and Hunter Park

An alignment shift farther west to avoid Hunter Park and the 11 historic houses at 5800 West 3500 South is possible only if the alignment is shifted more than 1,000 feet west of its proposed alignment. This would result in the situation

discussed at the beginning of Section 28.5.2.2 in which there is an undesirable strip of land between the 5800 West freeway alignment and the utility corridor. This alignment would create an “island” of homes and businesses between the new freeway and the utility corridor.

This alignment is not prudent because it would significantly increase the number of residential and business relocations. The 5800 West Freeway Alternative has been designed near the utility corridor to minimize impacts to the surrounding area. This section of West Valley City west of the utility corridor and Hunter Park is densely populated. An alignment west of Hunter Park and the historic houses in this location would create another barrier in West Valley City (with the utility corridor being the other barrier). One of the reasons for the design of the 5800 West Freeway Alternative is to use the utility corridor to minimize the number of north-south barriers that bisect the city (others being Interstate 215 [I-215] and Bangerter Highway).

West Alignment Shifts To Minimize Number of Uses to the Historic Houses and Minimize Use of Hunter Park

A western alignment shift to minimize the impacts to both the historic properties used by the 5800 West Freeway Alternative and the impacts to Hunter Park was analyzed (see Figure 28-27, West Alignment Shift B at Hunter Park). This alignment shift would be about 175 feet west of the proposed 5800 West alignment. Also, the interchange at 3500 South would be shifted to the south about 50 feet to avoid the historic houses on the north side of 3500 South. This west alignment shift would require relocating the Rocky Mountain Power lines in that area to the west over the Hunter Park baseball/softball diamonds.

This alignment would directly use and adversely affect four of the 11 historic houses at this location; another two historic properties would have no adverse effect under Section 106 and a *de minimis* impact under Section 4(f). These historic houses are located on 3500 South and would be affected (direct use—not *de minimis*) as a result of the MVC interchange with this cross street. These houses are 5769 West 3500 South, 5765 West 3500 South, and 5755 West 3500 South.

This alignment would shift the location of the 5800 West freeway and the utility corridor into Hunter Park without taking the entire park. It would still adversely affect three baseball diamonds (depending on the placement of power poles) and result in the loss of one soccer field and the loss of access and parking spaces. This impact would render Hunter Park useless because it currently hosts a number of softball/baseball tournaments where all diamonds are used. Leaving

just one ball diamond is not acceptable at Hunter Park, according to officials with jurisdiction over it.

Letters were received from the West Valley City Manager and Salt Lake County Parks and Recreation (see Appendix 28C, Hunter Park Information and Correspondence). West Valley City stated in its letter that “of critical importance in this regard is making sure that the project alignment does not materially impair the value or utility of any of the City’s irreplaceable assets, including our Hunter Park.” The City places a high value on Hunter Park and feels that the park has more cultural significance to the city than the historic properties that would be affected by the 5800 West Freeway Alternative.

Salt Lake County stated in its letter that it “strongly advise[s] that the alignment(s) for...the 5800 West Freeway Alternative be shifted away from Hunter Park to avoid any impacts to the park.” Further, the County stated that adverse impacts to Hunter Park “would dramatically impair the County’s ability to meet the needs of the community in providing ball fields for organized sports programs.”

Based on these factors, the overall Section 4(f) impacts of this alignment shift are greater than the Section 4(f) impacts of the 5800 West Freeway Alternative. Therefore, this alignment shift is not a prudent and feasible alternative for avoiding or minimizing harm to the 11 historic properties along 5800 West.

East Alignment Shift To Avoid Historic Houses

An eastern alignment shift would affect about 23 historic houses.⁶ Therefore, the overall Section 4(f) impacts of this alignment shift are greater than the Section 4(f) impacts from the proposed 5800 West Freeway Alternative. It does not avoid or minimize harm to Section 4(f) resources.

In addition, an eastern alignment shift would have the following drawbacks:

- **Increased Relocations.** An eastern alignment shift would increase the number of residential and business relocations through this area.
- **Engineering and Traffic Constraints.** Traffic operations at the new Mountain View Corridor and 3500 South interchange would fail because of its close proximity to 5600 West, which is a north-south road. An eastern alignment shift would not meet the requirements established by UDOT for separation of an interchange and a parallel arterial (5600 West).
- **Community Disruption.** As discussed in Section 28.5.2.2, 5800 West Freeway Alternative – Alignment Shifts, the 5800 West Freeway Alternative was designed to use the utility corridor. An alignment shift eastward would add another barrier bisecting West Valley City. A small sliver of property would remain between the utility corridor and the eastern shift of the 5800 West Freeway Alternative and would likely remain undesirable.

Because of increased environmental impacts, engineering and traffic constraints, and increased community disruption, an eastern alignment shift of the 5800 West Freeway Alternative is not considered prudent at this location.

⁶ Based on visual reconnaissance and date of structure (February 5, 2007).

Prudence of Alignment Shifts for the 5800 West Freeway Alternative

This section discusses the prudence of the various alignment shifts discussed above. Specifically, alignment shifts in this area are not prudent for several reasons.

- Western alignment shifts to either avoid or minimize impacts to the historic houses would require the relocation of or impacts to the parking lot and at least one baseball diamond of Hunter Park. This park is considered an important amenity to the community, and replacement property is difficult to find. Both West Valley City and Salt Lake County have voiced strong concern regarding the Mountain View Corridor and its potential to affect this park.
- An alignment shift away from the utility corridor would not optimize the space available in the corridor. The footprint for the 5800 West freeway and that of the utility corridor would not be shared.
- An alignment shift away from the 5800 West Freeway Alternative would not use the power corridor as effectively. West Valley City officials are strongly concerned with creating another barrier in the city similar to the power corridor. The 5800 West Freeway Alternative would use the utility corridor space as much as possible. An additional barrier would be eliminated or minimized by combining the new freeway with the power corridor.
- Alignment shifts would require additional environmental impacts, including relocations. The 5800 West Freeway Alternative would run adjacent to or within the power corridor to minimize impacts to the community and surrounding areas.

Replacement Property for Hunter Park

Several avoidance alternatives were considered for the historic houses east of Hunter Park that would be adversely affected by the proposed 5800 West Freeway Alternative. Replacement property for Hunter Park was evaluated for the possibility of relocating this park if the 5800 West Freeway Alternative were to completely use it. Theoretically, the Hunter Park area could be used for the alignment of the 5800 West Freeway Alternative while avoiding uses to the historic resources to the east. Hunter Park is 29 acres, including the area within the power corridor that is owned by Rocky Mountain Power. The attempt to locate another area of similar size in the community was not successful and was not acceptable to Salt Lake County Parks and Recreation. The methodology for locating a replacement property is explained below.

Methodology. In order to find comparable replacement property for the relocation of Hunter Park, the following assumptions were made:

- Only areas within West Valley City boundaries were reviewed. A park outside city boundaries would be too far from the existing Hunter Park location.
- The replacement property needs to be contiguous and be large enough to provide the same amenities as the existing park.
- The area must be within comparable zoning. Areas zoned for commercial, business, and industrial were not considered because these areas typically do not provide an equivalent location as the existing Hunter Park. Therefore, land north of Parkway Boulevard (2700 South) was not considered.
- Areas already used for parks or planned parks were not considered. This included areas that are considered for wetland preservation and stormwater park overlay.

Based on the above assumptions and a review of existing zoning maps and land-use plans, no site was identified for the replacement of Hunter Park. West Valley City is rapidly approaching build-out, and few large tracts of land are available for a replacement park.

Relative Harm to Section 4(f) Resources

The 5800 West Freeway Alternative would adversely affect 11 historic properties near 3500 South (see Table 28.4-4 above, Description of Uses of Historic Resources from the Salt Lake County Freeway Alternatives). An alignment shift to avoid and/or minimize these impacts was evaluated and was considered not prudent. While Hunter Park would be only one Section 4(f) use versus the proposed 11 uses that would occur if the 5800 West Freeway Alternative were constructed, adversely affecting this park has greater overall harm to the community and users of the park. This is because the importance of Hunter Park to the community outweighs the importance of the 11 historic houses, which are common examples of a widespread property type (residential structures from the WWII era). Letters have been received from West Valley City and Salt Lake County regarding the importance of Hunter Park to the community and their desire to keep it where it is currently located.

28.5.2.3 7200 West Freeway Alternative – Alignment Shifts

The 7200 West Freeway Alternative would use five historic resources: 3080 South 7200 West, 3372 South 7200 West, 3551 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West (see Figure 28-19, Impacts to Historic Properties for 7200 West in Salt Lake County). This section evaluates minor alignment shifts at two locations along the corridor where the direct use of the five Section 4(f) resources occurs from the 7200 West Freeway Alternative. The two locations are:

- Location 1 (East Shift) – Between Parkway Boulevard (about 2700 South) and 3600 South for the direct-use historic houses at 3080 South and 3372 South 7200 West (see Figure 28-28, 7200 West Alignment Shift for 3080 South and 3372 South).
- Location 2 (West Shift) – Between 3300 South and 4100 South for the direct-use historic houses located at 3351 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West across the street from the LDS Bishop’s Storehouse located at about 3600 South 7200 West (see Figure 28-29, 7200 West Alignment Shift for 3551 South, 3641 South, and 3717 South).

At both locations, the 7200 West Freeway Alternative uses a couplet system along its frontage road with slip ramps for access to and from the 7200 West freeway. The couplet system includes a northbound frontage road on the east side of the 7200 West freeway and a southbound frontage road on the west side. These ramps and couplet system are required to provide access to residences and businesses along 7200 West and to reduce the overall footprint of the freeway.

Between SR 201 and 4100 South, the existing 7200 West roadway is the boundary separating West Valley City from Magna Township. The alignment for the 7200 West Freeway Alternative has been designed to use this geographic boundary to avoid creating another obstacle for residents of West Valley City and Magna. Shifting an alignment away from 7200 West is not prudent since this would isolate a small “island” of residents between the new freeway and the existing 7200 West, thus isolating the residents of this “island” from their respective city. If the freeway were shifted off of the existing 7200 West roadway, the couplet system could not be used. This would require a minimum spacing of 1,328 feet between 7200 West and the realigned freeway to allow proper traffic operations in accordance with UDOT’s access-management standards. As a result, only minor alignment shifts that would make the most of the existing 7200 West roadway were analyzed.

Location 1 (East Shift) – 3080 South 7200 West and 3372 South 7200 West

At Location 1, there are four historic properties in close proximity of each other; two are located on the east side of the existing 7200 West roadway and the other two are on the west side (see Figure 28-28, 7200 West Alignment Shift for 3080 South and 3372 South). The proposed 7200 West Freeway Alternative would use the historic houses at 3080 South 7200 West and 3372 South 7200 West, both of which are located on the west side of the existing 7200 West roadway.

The 7200 West Freeway Alternative in this location runs along the western side of the existing 7200 West roadway, in part to avoid using other eligible historic houses (the alternative avoids the historic houses at 3075 South 7200 West and 3109 South 7200 West which are located on the east side of the road). An alignment along either the east or west side of the existing 7200 West roadway would require two direct Section 4(f) uses.

A minor alignment shift to the east side of 7200 West to avoid using 3080 South 7200 West and 3372 South 7200 West was analyzed but is considered not prudent. The analysis considered an eastern shift between Parkway Boulevard on the north (about 2700 South) and 3600 South (about 800 feet south of 3500 South), a distance of about 1 mile.

The proposed 7200 West Freeway Alternative would require 17 fewer relocations over a 1-mile stretch than an alignment shift to the east side of the existing 7200 West roadway. The proposed location of the 7200 West Freeway Alternative would require 81 relocations between 2700 South (Parkway Boulevard) and 3600 South (just south of the 3500 South), while a freeway alignment on the east side of 7200 West would require 98 relocations (see Figure 28-28).

In summary, an alignment shift to the east to completely avoid affecting the historic houses at 3080 South 7200 West and 3372 South 7200 West is not prudent. An alignment on the east side of 7200 West at this location would use two other historic resources/Section 4(f) resources (3075 South 7200 West and 3109 South 7200 West) and would require 17 more relocations along a 1-mile stretch of the corridor (see Figure 28-28).

Location 2 (West Shift) – 3551 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West

The 7200 West Freeway Alternative would use three historic houses: 3551 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West. These three historic houses are located on the east side of 7200 West and are within about

1,300 feet of each other. The analysis was conducted between 3300 South and 4100 South, a distance of about 1.25 miles.

Section 28.5.2.3, 7200 West Freeway Alternative – Alignment Shifts, discusses the importance of the 7200 West Freeway Alternative using the existing 7200 West roadway in order to minimize environmental impacts. 7200 West is the geographic boundary between West Valley City and Magna, and the proposed freeway was designed so that it would not to create another obstacle for the residents of these cities. An eastern alignment shift (behind or to the east of the historic homes) at this location would have wide-ranging environmental impacts. The realigned freeway would be located behind or to the east of these historic houses, which face west onto 7200 West. The number of residential relocations would likely dramatically increase due to the housing density in this area. Also, an eastern alignment would increase community disruption by leaving a narrow “island” of homes between the 7200 West freeway alignment and the 7200 West arterial. These homes would be located in West Valley City but would be cut off from the city itself by the freeway. For this reason, only a minor alignment shift to the west was analyzed for avoiding historic homes.

An alignment shift to the western side of the existing 7200 West roadway was analyzed but is considered not prudent. This analysis considered a western shift beginning at about 3300 South and continuing southward to 4100 South, a distance of about 1.25 miles. The proposed 7200 West Freeway Alternative would require 17 fewer relocations than an alignment shift to the west side of the existing 7200 West roadway. The preferred location of the 7200 West Freeway Alternative would require 153 relocations between 3300 South and 4100 South, while a freeway alignment on the west side of 7200 West would require 170 relocations (see Figure 28-29, 7200 West Alignment Shift for 3551 South, 3641 South, and 3717 South). A western alignment shift would affect and require the relocation of the LDS Bishop’s Storehouse. Also, an alignment shift to the west would require the relocation of a grocery store located on the southwest corner of 7200 West and 3500 South. This is one of the few grocery stores available to the residents of the area.

A western alignment shift would reduce the number of Section 4(f) resources and avoid using the three historic properties. However, it is considered not prudent because of increased relocations and because it requires the relocation of the LDS Bishop’s Storehouse.

Prudence of an Alignment through the Magna LDS Bishop's Storehouse

One reason an alignment shift to the west at this location is not prudent is that it would require the relocation of the Magna LDS Bishop's Storehouse.⁷ The 7200 West Freeway Alternative in this location has been shifted to the east side of the existing 7200 West roadway, in part to avoid adversely affecting the LDS Bishop's Storehouse and its services and amenities. The Magna LDS Bishop's Storehouse is located on a parcel about 10 acres in size (see Figure 28-29) and provides many different services to the low-income and other individuals in need of assistance. The Bishop's Storehouse is owned by the LDS Church and is available to all residents in the area, regardless of religion. The Magna Bishop's Storehouse includes a 30,000-square-foot building that provides the following services:

- **Grocery and Clothing Store.** This store includes basic food items and clothing. These stores are not open to just anyone; individuals must receive a referral from their bishop (LDS leader of the local congregation). However, all items are free, and no money is exchanged.
- **Home Storage Center and Dry-Pack Cannery.** Located within the Bishop's Storehouse is the home storage center and dry-pack cannery. Individuals can use this facility to dry-pack food items for storage and learn how to be self-sufficient.
- **Five Grain Silos.** These grain silos are used to store wheat, corn, and other grains for later use. The silos are located north of the 30,000-square-foot building. Grain is brought from the many LDS-owned and -operated farms in the valley and neighboring counties.
- **LDS Employment Resource Services.** Also located within the Bishop's Storehouse is an office for LDS Employment Resource Services. In this office, unemployed individuals are provided with counseling and other tools needed to help them find employment. Job referrals are also listed with this office, and applicants receive assistance in finding a job.

In general, the storehouse provides necessities such as food, clothing, and employment assistance for low-income families and others in need. The storehouse stocks basic food and essential household items, which are produced largely from LDS Church agricultural properties, canneries, and light manufacturing operations. All work is performed by volunteers and recipients and is largely independent of the commercial economy. The contribution of time, talents, and resources of the LDS Church membership from various locations

⁷ The Magna LDS Bishop's Storehouse is also referred to as the Bishop's Storehouse throughout this EIS.

sustains the storehouse (LDS Church 2006). The LDS Bishop's Storehouse is an important facility for the low-income and others in need within this area of Salt Lake County.

A western alignment shift to avoid impacts to 3551 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West (see Figure 28-29) requires the relocation of the Magna LDS Bishop's Storehouse and its associated amenities (employment resource services, home storage center and dry-pack cannery, five grain silos, grocery and clothing store, and second-hand store). Since these services are related to each other and to better serve those in need, these amenities are all located within the 30,000-square-foot building. This alternative is not prudent since it would directly use and adversely affect the LDS Bishop's Storehouse and another grocery store and businesses directly north of the storehouse.

As discussed above, this western alignment shift for the 7200 West Freeway Alternative avoids affecting three historic properties but would require the relocation of the Magna Bishop's Storehouse. Therefore, if this avoidance alternative were selected, the 7200 West Freeway Alternative would have only two Section 4(f) not *de minimis* uses. However, after consideration of the other environmental impacts such as wetlands and relocations) and other factors, the 5800 West Freeway Alternative would remain as the Preferred Alternative in Salt Lake County.

Context and the Selective Reconnaissance Survey

In this location, the 7200 West Freeway Alternative would use three Section 4(f) historic properties (3551 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West), all of which are located across the street from the LDS Bishop's Storehouse (see Figure 28-19, Impacts to Historic Properties for 7200 West in Salt Lake County). The *Selective Reconnaissance Survey* was conducted as part of the 3500 South Roadway Widening project for UDOT. The purpose of this survey was to document the historic structures (buildings only) within West Valley City and eastern parts of Magna. This report states that a high number of historic houses exists along or near 3500 South in West Valley City close to the three historic houses used at this location by the 7200 West Freeway Alternative. The study area for the *Selective Reconnaissance Survey* extended from SR 201 on the north to 4100 South on the south and between Redwood Road on the east and 8400 West on the west. Note that not all historic properties within these limits were identified, only those along 3500 South and other major roads including 7200 West.



This study identified 20 historic subdivisions, which are shown in Figure 28-25, Historic Subdivisions. These subdivisions have 733 individual potential historic properties. (The subdivisions were constructed in or before 1958; individual houses in the subdivisions were not documented.) Of these 733 properties, 379 are considered eligible for inclusion in the NRHP, which would make them subject to Section 4(f). A total of 199 historic houses (of the 379) are considered WWII-Era or Post War-type structures, which is almost 53% of the eligible historic buildings in the *Selective Reconnaissance Survey* study area. The vast majority of historic houses in West Valley City and Magna are considered WWII-type structures. Two of the three historic houses (3551 South 7200 West, a WWII-Era style, and 3641 South 7200 West, a Ranch/Rambler built in 1955) are considered WWII-Era or Post War-type structures. There are a large number of these types of historic houses in the area, and they have not been singled out as an important structure that would be important and necessary to preserve since they are in large numbers in the area.

Summary of Avoidance Alternatives for 3551 South 7200 West, 3641 South 7200 West, and 3717 South 7200 West

This section discussed an avoidance alternative for these three Section 4(f) resources. However, it has been determined that an alignment shift to the west to avoid these historic structures is not prudent. A western alignment shift would require 17 more relocations along a 1.25-mile stretch of the 7200 West Freeway Alternative. A western alignment shift would adversely affect the LDS Bishop's Storehouse and its associated amenities. The LDS Bishop's Storehouse supports the low-income and minority populations of the area with necessities including food, clothing, and assistance with employment. Finally, the types of historic houses used by the proposed 7200 West Freeway Alternative are found in large numbers in West Valley City and Magna. This is supported by a *Selective Reconnaissance Survey*, which found that over 50% of the historic houses (older than 50 years of age) are WWII-Era or Post War-type structures.

28.5.3 Prudence of the 7200 West Freeway Alternative

The 7200 West Freeway Alternative would cause more overall harm to the natural and built environments than would the 5800 West Freeway Alternative.

28.5.3.1 Comparison of Harm to Section 4(f) Resources

In terms of the impacts from the 5800 West Freeway and 7200 West Freeway Alternatives on Section 4(f) resources, the 5800 West Freeway Alternative uses 11 historic resources, while the 7200 West Freeway Alternative uses five historic resources. The impacts to recreation resources for both alternatives have been



determined to be *de minimis* as defined in Section 28.1.3, *De Minimis* Impacts. Table 28.5-1 summarizes the Section 4(f) uses for both Salt Lake County freeway alternatives.

Table 28.5-1. Total Number of Section 4(f) Uses from the Salt Lake County Freeway Alternatives

Section 4(f) Use	Alternative	
	5800 West Freeway	7200 West Freeway
Historic properties (not <i>de minimis</i>)	11	5 ^a
WWII-Era or Post-WWII types	7	4
Parks/recreation areas (<i>de minimis</i> /joint use)	5	2
Total use (not including <i>de minimis</i>)	11	5

^a As discussed earlier, a western alignment shift for the 7200 West Freeway Alternative avoids affecting three historic properties but would require the relocation of the Magna Bishop's Storehouse. Therefore, if this avoidance alternative were selected, the 7200 West Freeway Alternative would have only two Section 4(f) not *de minimis* uses. However, after consideration of the other environmental impacts (such as wetlands and relocations) and other factors, the 5800 West Freeway Alternative would remain as the Preferred Alternative in Salt Lake County.

The qualitative impacts were considered for each alternative. Chapter 17, Historic, Archaeological, and Paleontological Resources, describes the different SHPO ratings.

- SHPO A-rated historic buildings are those that retain integrity; are an excellent example of a style or type; are unaltered or have only minor alterations or additions; or are individually eligible for the NRHP under Criterion C.
- A SHPO B-rated historic building was built within the historic period and retains integrity; is a good example of a style or type, but is not as well-preserved or well-executed as A buildings; has more substantial alterations or additions than A buildings, though the overall integrity is retained; or is eligible for the NRHP as part of a potential historic district or primarily for historical, rather than architectural, reasons.

The 5800 West Freeway Alternative uses four SHPO A-rated buildings and seven SHPO B-rated buildings. The 7200 West Freeway Alternative uses one SHPO A-rated building and three SHPO B-rated historic buildings. The majority of historic houses in West Valley City and Magna are considered WWII-Era or Post-War styles. Seven of the 11 impacts to the historic houses on 5800 West are this style of structure representing about 64% of the impacts from this alternative.

28.5.3.2 Overall Comparison

This section provides an overall comparison of the 5800 West Freeway and 7200 West Freeway Alternatives.

Wetlands

Under the federal Clean Water Act and through the Section 404 permitting process, the U.S. Army Corps of Engineers (USACE) has been given responsibility and authority to regulate fill materials into waters of the U.S., including wetlands. Under Section 404 of the Clean Water Act, no discharge of dredged or fill material shall be permitted in waters of the U.S. if there is a less environmentally damaging practicable alternative to the proposed discharge. An alternative is practicable if it is available and capable of being implemented after taking into consideration cost, existing technology, and logistics in light of overall project purposes. For actions subject to NEPA, where USACE is the permitting agency or, as in this case, a cooperating agency, the analysis of alternatives required for NEPA documents must provide the information necessary for the evaluation of alternatives and selection of the least environmentally damaging practicable alternative (LEDPA).

To evaluate the expected impacts to wetlands, numerous meetings were held with USACE, the U.S. Fish and Wildlife Service, and the Utah Division of Wildlife Resources. Through these meetings, a functional assessment methodology was developed to determine the wetland impacts of each alternative to help determine which alternative is the LEDPA. In addition to the functional assessment, the resource agencies wanted to focus on rare or irreplaceable wetlands in determining the LEDPA based on these wetlands' low frequency of occurrence and/or the inability to compensate for impacts to them through creating new wetlands, restoring existing wetlands, or enhancing existing wetlands. For Salt Lake County, playas and vegetated playas are of particular importance, given the difficulty of mitigating these types of waters of the U.S. Attempts to re-create the wetland hydrology and soil chemistry fundamental to these systems have been met with limited success. Therefore, the proposed alignments in Salt Lake County were assessed according to their impacts to playas. Table 28.5-2 below compares the impacts to wetlands based on the functional assessment and the impacts to playa wetlands.

Table 28.5-2. Comparison of Wetland Impacts from the Salt Lake County Freeway Alternatives

Alternative	Functional Units Lost (FCU)	Primary and Secondary Impacts to Playa Wetlands (acres)
5800 West Freeway	42	70
7200 West Freeway	49	138

FCU = functional capacity units, which is a measure for assessing impacts to the loss of the wetland function or quality

The 7200 West Freeway Alternative has greater overall impact to wetlands in both functional units lost and impacts to playa wetlands. The most important difference between the two alternatives is the impacts to the playa wetlands; the 7200 West Freeway Alternative has almost twice as much impact to those types of wetlands. USACE considers playa wetlands rare and irreplaceable because of the limited success in creating these types of wetlands and also the considerable loss of playa wetlands along the Wasatch Front from development and agricultural activities. Based on the above information, it is likely that the 5800 West Freeway Alternative would be selected as the least damaging alternative to the aquatic environment that meets the project's purpose. For more information about wetlands, see Chapter 15, Ecosystem Resources.

Transportation Performance and Congestion Relief

The 5800 West Freeway Alternative better meets the transportation need as identified in Chapter 1, Purpose of and Need for Action. Extensive traffic modeling was conducted as part of this EIS process. This modeling indicated that more vehicles would use the 5800 West Freeway Alternative compared to the 7200 West Freeway Alternative. Traffic on the east-west arterials would decrease by 12%, while the north-south arterial traffic would decrease by 7% with the 5800 West Freeway Alternative compared to the 7200 West Freeway Alternative.

The traffic analysis showed that traffic operations on the 5800 West freeway functioned better compared to those on the 7200 West freeway. Generally, motorists would use the Mountain View Corridor to travel to downtown Salt Lake City and the surrounding areas. The 7200 West freeway is farther west than the 5800 West freeway; motorists are more likely to use a facility that is closer to their destination.

Therefore, the 7200 West Freeway Alternative would carry less traffic, result in more delay, and increase traffic along the arterial roadway system in western Salt Lake County compared to the 5800 West Freeway Alternative.

Home and Business Relocations

Both Salt Lake County alternatives would require the relocation of homes and businesses. Table 28.5-3 compares the number of relocations from both alternatives.

Table 28.5-3. Comparison of Home and Business Relocations from the Salt Lake County Freeway Alternatives

Relocation Type	Alternative	
	5800 West Freeway	7200 West Freeway
Home relocations	179	224
Business relocations	20	24
Total relocations	199	248

The 5800 West Freeway Alternative has 45 fewer home relocations and four fewer business relocations than the 7200 West Freeway Alternative for a total of 49 fewer relocations. The primary difference in impacts between these two alternatives is due to the fact that the 5800 West Freeway Alternative runs adjacent to the utility corridor, which optimizes this area and minimizes the overall footprint of these two facilities.

The 7200 West Freeway Alternative also isolates about 45 residential homes between 7200 West, 4100 South, and about 3700 South. This alternative would create an “island” of residential houses in West Valley City that would be isolated from other subdivisions and areas in West Valley City. For more information about relocations, see Chapter 6, Community Impacts.

Environmental Justice

One of the relocations under the 7200 West Freeway Alternative would be a Spanish Jehovah’s Witness church at 3164 South 7200 West. Many attempts were made to contact representatives of this church to discuss the expected impacts, but no one from the congregation responded. Removal of this church would result in an environmental justice impact as defined in Chapter 7, Environmental Justice.

Community Cohesion

The 7200 West Freeway Alternative would cause more disruption to community cohesion than would the 5800 West Freeway Alternative. The 5800 West Freeway Alternative would use as much of the utility corridor as possible by

combining the footprints from the freeway and utility corridor to minimize impacts to the surrounding area. The 7200 West Freeway Alternative does not use the utility corridor and therefore would be more disruptive and have greater impacts to the surrounding communities. The existing and planned zoning in West Valley City along the utility corridor and the 5800 West Freeway Alternative is a mix of residential (low and high density), commercial, agricultural, and industrial. The 7200 West Freeway Alternative passes through areas that are mostly zoned for residential uses. For more information about community cohesion, see Chapter 6, Community Impacts.

Land-Use Plans and Policies

An existing utility corridor runs the length of Salt Lake County. In the West Valley City area, this utility corridor acts as a partition within the city where no development or only limited development can occur. The 5800 West Freeway Alternative through West Valley City runs adjacent to the existing utility corridor right-of-way, an arrangement that optimizes the space between the two facilities to minimize the overall footprint. West Valley City has supported the 5800 West Freeway Alternative over the 7200 West Freeway Alternative. The West Valley City Council and Mayor prepared and signed a resolution on September 2, 2003, giving the City's support to the 5800 West Freeway Alternative (see Appendix 28G, West Valley City Resolution for the 5800 West Freeway Alternative). In addition, the West Valley City general plan map shows the location of the 5800 West freeway; the 7200 West freeway is not shown on this map.

Other Environmental Considerations

The following environmental resources were compared to determine the overall harm of the Salt Lake County freeway alternatives:

- The 7200 West Freeway Alternative would affect more farmland, including prime and unique farmland, than would the 5800 West Freeway Alternative. The 5800 West Freeway Alternative would affect 22 acres of prime and unique farmland, while the 7200 West Freeway Alternative would affect 30 acres of prime and unique farmland. For more information about farmland impacts, see Chapter 5, Farmlands.
- The 7200 West Freeway Alternative would affect more floodplains than would the 5800 West Freeway Alternative. The 5800 West Freeway Alternative would affect 24 acres of floodplains, while the 7200 West Freeway Alternative would affect 29 acres. For more information about floodplain impacts, see Chapter 16, Floodplains.

- The 7200 West Freeway Alternative has greater noise impacts as discussed Chapter 13, Noise. A noise impact is defined by the federal Noise-Abatement Criteria (NAC) and other state guidelines. The 5800 West Freeway Alternative would have 446 residential noise impacts, while the 7200 West Freeway Alternative would have 739 residential noise impacts.

28.5.3.3 Conclusion

Based on the factors described above, the 7200 West Freeway Alternative and the 5800 West Freeway Alternative have similar impacts to Section 4(f) properties. While the Section 4(f) impacts would be less with the 7200 West Freeway Alternative, that alternative would cause much greater harm to irreplaceable playa wetlands. In addition, the 7200 West Freeway Alternative would carry less traffic, would provide less congestion relief, would cause more relocations and community disruption, would be less consistent with local land-use plans, and would have a greater environmental justice impact. Given these impacts, the 7200 West Freeway Alternative is not a prudent alternative for avoiding or minimizing harm to the Section 4(f) resources used by the 5800 West Freeway Alternative. Table 28.5-4 below summarizes the environmental and other issues for both Salt Lake County freeway alternatives.

As discussed above, this western alignment shift for the 7200 West Freeway Alternative avoids affecting three historic properties but would require the relocation of the Magna Bishop's Storehouse. Therefore, if this avoidance alternative were selected, the 7200 West Freeway Alternative would have only two Section 4(f) not *de minimis* uses. However, after consideration of the other environmental impacts (such as wetlands and relocations) and other factors, the 5800 West Freeway Alternative would remain as the Preferred Alternative in Salt Lake County.

Table 28.5-4. Comparison of Environmental Impacts from the Salt Lake County Freeway Alternatives

Impact Category	Alternative	
	5800 West Freeway	7200 West Freeway
Wetland impacts		
Functional capacity units (FCU) lost (primary and secondary)	42 FCU	49 FCU
Impacts to playa wetlands (primary and secondary)	70 acres	138 acres
Transportation performance and congestion relief	This alternative performed better and removed more vehicles from the arterial roadway system.	This alternative, when compared to 5800 West Freeway Alternative, did not perform as well.
Home and business relocations		
Home	179	224
Business	20	24
Environmental justice impacts	None	Relocation of Spanish Jehovah's Witness church
Community cohesion impacts	This alternative is uses the existing utility corridor and is shown on West Valley City maps. It has less impact to community cohesion than the 7200 West Freeway Alternative.	This alternative is more disruptive to the community than the 5800 West Freeway Alternative.
Land-use plans and policies	Better meets the land uses and zoning of West Valley City compared with 7200 West Freeway Alternative.	The 7200 West Freeway Alternative is not shown on the West Valley City general plan map where 5800 West is shown.
Farmland impacts (prime farmland)	22 acres of prime farmland	30 acres of prime farmland
Floodplain impacts	24 acres	29 acres
Noise impacts	446 residences	739 residences

28.5.4 Utah County Avoidance Alternatives

This section describes the avoidance alternatives for the three alternatives in Utah County. Location/mode alternatives are described first, followed by alternatives considered for each resource.

28.5.4.1 Location/Mode Alternatives in the Utah County Impact Analysis Area

Location alternatives are alignments on parallel or similar corridors that avoid affecting Section 4(f) resources in Utah County. The Utah County location alternatives are shown in Figure 28-30, Location Alternatives in Utah County. These alternatives are global avoidance alternatives that apply to any of the alternatives in Utah County.

An *Alternatives Screening Report* (Parsons Brinckerhoff 2004) and an *Alternatives Screening Report Addendum* (HDR 2007) were prepared for the Mountain View Corridor. The analysis in this chapter is based on the two screening reports. The *Alternatives Screening Report* and *Alternatives Screening Report Addendum* describe the screening process for eliminating alternatives.

Location alternatives considered for this Section 4(f) evaluation are summarized from this report. The report also discussed three other studies conducted within the MVC study area: the Western Transportation Corridor Study, North Valley Connectors Study (Utah County), and the Inter-Regional Corridor Alternatives Analysis.

The location alternatives (roadway concepts) considered for Utah County are described in the following sections. These alternatives are shown in Figure 28-30.

Implement Transit Only

A number of transit alternatives were considered, including a transit-only alternative. This alternative would include providing additional transit opportunities within the MVC study area without any new roads. This alternative was eliminated from further consideration for the following reasons:

- WFRM and MAG concluded that both highway and transit investments are needed in the MVC study area to meet existing and future traffic needs. A transit-only alternative does not provide enough capacity to meet the requirements of the project's purpose of improving regional mobility.

- A transit-only alternative does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems

Construct a New Highway West of Camp Williams to Eagle Mountain

This alternative included construction of a new highway west of Camp Williams to connect into Eagle Mountain (this alternative is not shown in Figure 28-30). This alternative was eliminated from further consideration for the following reasons:

- Travel demand sensitivity testing during the Envision Utah Growth Choices process showed that a facility west of Camp Williams would have limited use and would not meet the project purpose of improving regional mobility.
- This highway would not meet the north-south and east-west travel demand in Utah County.
- This alternative does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems

Construct a New Highway West of Utah Lake

This alternative includes construction of a new highway west of Utah Lake. This alternative was eliminated from further consideration for the following reasons:

- About 50% of the vehicle trips in northwestern Utah County are to the Provo-Orem area to the south. A highway west of Utah Lake would not connect to the Provo-Orem metropolitan area and would not meet the project purpose of improving regional mobility in the MVC study area.

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- This alternative does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems

Construct a New Causeway or Bridge across Utah Lake

This alternative includes construction of a new bridge or causeway across Utah Lake and would connect somewhere east of the lake in Lindon, Orem, or Provo. This alternative was eliminated from further consideration for the following reasons:

- Travel demand sensitivity testing during the Envision Utah Growth Choices process showed that use of a facility west of Utah Lake drops off significantly at about 7350 North in Utah County (about 1900 South) northwest of Utah Lake.
- This alternative would have substantial environmental impacts to Utah Lake, which is home to several sensitive species such as the federally listed endangered June sucker.
- Utah Lake is considered a recreation resource. Bisecting it would create substantial impacts to its recreational value.
- The cost of this alternative would be about twice that of a land-based alternative.
- This alternative does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems

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Convert Redwood Road to a Freeway

Redwood Road is an important corridor that is one of two connections between Salt Lake County and Utah County. However, converting Redwood Road (SR 68) to a freeway was eliminated from consideration for the following reasons:

- Converting Redwood Road to a freeway does not meet the project purpose. This alternative does not resolve traffic congestion issues within the MVC study area.
- Converting Redwood Road to a freeway does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems
- Some of the Section 4(f) resource canals would be affected by this alternative. This alternative could increase the number of Section 4(f) resources that would be affected.

Improve or Widen SR 73 (Main Street in Lehi)

This alternative would improve the existing SR 73 that runs east-west between Eagle Mountain, Saratoga Springs, and Lehi. It was eliminated from consideration for the following reasons:

- This alternative would have a high number of environmental impacts, including relocations. These impacts would be greater than those from the alternatives being considered in Utah County for the MVC.
- This alternative does not fulfill the transportation goals defined in the Envision Utah Growth Choices process. The Growth Principles and Objectives that this alternative would not meet include:
 - Providing public infrastructure that is efficient and adequately maintained
 - Providing regional mobility through a variety of interconnected transportation choices
 - Integrating local land use with regional transportation systems

- Downtown Lehi is a historic district. This alternative would result in more Section 4(f) impacts than the other Utah County MVC alternatives being considered.

These alternatives do not meet the project's purpose and do not add enough capacity to meet the existing and future traffic demand in northern Utah County. In addition, some of the alternatives would increase Section 4(f) impacts. Downtown Lehi has been designated a historic district, and any alternative through downtown Lehi would have a higher number of Section 4(f) impacts.

28.5.4.2 Southern Freeway Alternative – Alignment Shifts

The Southern Freeway Alternative would directly use and adversely affect two historic properties: the Provo Reservoir Canal and the historic house at 7364 North 9550 West in Lehi. The canal would be adversely affected by all of the Utah County alternatives. The Southern Freeway Alternative would also use the Northlake Park in Lehi. The uses of this park are not considered *de minimis* by Lehi City and, therefore, avoidance alternatives were analyzed.

Alignment Shifts for Provo Reservoir Canal

This canal runs along the eastern slopes of the Traverse Mountains. In the Utah County impact analysis area, the canal runs through the cities of Saratoga Springs and Bluffdale and also passes through Camp Williams. The Provo Reservoir Canal is also known as the Jacob-Welby Canal in Bluffdale and as Murdock Ditch.

The Provo Reservoir Canal is gravity-fed and follows the natural contours of the surrounding area. It is a linear historic feature that begins near the mouth of Provo Canyon in Utah County and extends 23 miles before ending in Salt Lake County. About 4,400 linear feet of this canal would be affected by the freeway alternative that extends from Salt Lake County into Utah County. Avoidance alternatives considered for this location are not prudent because of the following reasons:

- **Increased Environmental Impacts.** Alignment shifts were considered to avoid affecting the Provo Reservoir Canal. The canal is a linear feature, and completely avoiding the canal is not prudent. However, designs were developed that measured the impacts to the canal versus impacts to other resources in the area. An alignment shift to the east would affect Camp Williams (entrance, parking lot, and other areas within the camp) and require the relocation of Redwood Road (SR 68). Any shift to the east would require realignment of Redwood Road, which would create additional impacts to Camp Williams (entrance and parking lot).

- **Engineering Constraints.** The adverse impacts to Provo Reservoir Canal in the MVC study area are a result of constraints of topography, Camp Williams, Redwood Road, and the Camp Williams electrical substation in Bluffdale (which is owned by Rocky Mountain Power). The MVC alignment at this location was designed to minimize impacts to Camp Williams by paralleling Redwood Road.

An alignment shift to the west to minimize impacts to the Provo Reservoir Canal is not prudent due to the steep topography. The Traverse Mountains lie to the west, and any shifting of the alignment in this direction would result in extensive roadway cuts that would extend to the top of the mountain. An alignment shift to the east is not prudent due to the location of the Camp Williams electrical substation, which would have to be relocated.

- **Housing Development Impacts.** An alignment shift to the east would affect a residential development in Bluffdale and would require relocations.

Because of increased environmental impacts, engineering constraints, and housing development impacts, an alignment shift of the Southern Freeway Alternative is not considered prudent at this location.

Alignment Shifts for 7364 North 9550 West in Lehi

The Southern Freeway Alternative would directly use and adversely affect this historic house in Lehi. This alternative includes an interchange with 9550 West at this location. Avoidance alternatives to the north or south of the historic property were evaluated and determined not to be prudent. An alignment shift to the south at this location would increase the amount of wetlands affected. The 1900 South alignment in this area has been designed to minimize the amount of wetland area affected. Between the Jordan River and the Loch Lomond subdivision, the 1900 South arterial would affect about 27 acres of wetlands. Shifting the alignment to the south would increase the wetland impacts to more than 41 acres.

In addition, a southern shift is limited due to the proximity of Utah Lake and its associated wetlands. Wetland Park, which is owned and operated by Utah County, could be affected by a southern alignment shift.

A northern shift at this location would also increase wetland impacts, as well as the number of relocations.

For these reasons, alignment shifts for 7364 North 9550 West in Lehi are not prudent. Alignment shifts would increase impacts on wetlands that are protected under Section 404 of the Clean Water Act.

Avoidance Alternative for Northlake Park

The Southern Freeway Alternative would require an access road into the Loch Lomond subdivision in Saratoga Springs that would use about 1.9 acres of Northlake Park. This park is owned and maintained by Lehi City, and the City does not consider this use to be *de minimis*. Therefore, this section discusses an avoidance alternative for Northlake Park.

In order to provide a minimum of two accesses into the Loch Lomond subdivision and to the subdivision just north of the park, a new bridge under the southern freeway and a new access road would be required (see Figure 28-31, Avoidance Alternative for Northlake Park). The bridge would be constructed under the southern freeway in the northeast corner of the Loch Lomond subdivision. This would provide an access from 1900 South that would connect to Perth Street in the subdivision. An access road would be constructed from Perth Street in the Loch Lomond subdivision to Lake View Drive in the subdivision just north of the park. A bridge would be constructed under the southern freeway at 500 West in Lehi. This avoidance alternative would require the relocation of five residences, three in Saratoga Springs and two in Lehi. The alternative shown for the southern freeway alignment and its access through Northlake Park would require three relocations.

28.5.4.3 2100 North Freeway Alternative – Alignment Shifts

The 2100 North Freeway Alternative would adversely affect four historic properties: the Provo Reservoir Canal, 1020 W. State Street (Lehi), 1060 W. State Street (Lehi), and 959 West 2100 North (Lehi).

Alignment Shift To Avoid Provo Reservoir Canal

This canal would be adversely affected by all of the Utah County alternatives. Canal avoidance and minimization are the same as described in Section 28.5.4.2 for the Southern Freeway Alternative.

Alignment Shift To Avoid 1020 W. State Street, 1060 W. State Street, and 959 West 2100 North in Lehi

The two historic houses at 1020 W. State Street and 1060 W. State Street in Lehi lie between State Street and I-15 directly south of the existing 1200 West interchange (see Figure 28-22, Impacts to Historic Houses in Utah County). The historic house located at 959 West 2100 North is on the east side of I-15. The Section 4(f) uses to these houses are a result of the new freeway-to-freeway interchange (Mountain View Corridor to I-15). Any alignment shift would require realigning the entire interchange to either the north or south. Alignment

shifts were considered and analyzed to avoid and minimize impacts to these three historic resources. Below is a discussion of northern and southern alignment shifts in this location.

- A northern alignment shift would require more than 150 relocations and would require the use of Pointe Meadow Park, which is located north of the existing 2100 North (see Figure 28-33, 2100 North Freeway Alternative – North Alignment Shift). The proposed 2100 North Freeway Alternative would require less than 10 relocations. Although a northern alignment shift avoids using these three historic resources, it is not prudent because of the large number of relocations and the complete use of Pointe Meadow Park, a Section 4(f) resource.
- An alignment shift to the south would also increase the number of relocations (more than 100). It would also adversely affect North Entrance Park and Gateway Park. The I-15 widening project has identified three other historic properties on State Street in Lehi (adjacent to but outside of the MVC study area). A southern alignment shift would require the use of these three eligible historic houses.

For the reasons described above, an alignment shift and relocation of the Mountain View Corridor to I-15 interchange to avoid adverse impacts to these historic houses is not considered prudent. Both northern and southern alignment shifts would affect other Section 4(f) resources and would have large numbers of relocations.

28.5.4.4 Arterials Alternative – Alignment Shifts

The Arterials Alternative would adversely affect five historic properties: the Provo Reservoir Canal, the Draper Irrigation Canal, and historic houses at 15400 S. Pony Express Road, 1020 W. State Street in Lehi, and 1060 W. State Street in Lehi (see Figure 28-22, Impacts to Historic Houses in Utah County).

Alignment Shifts for the Provo Reservoir Canal

This canal would be adversely affected by all of the Utah County alternatives. Canal avoidance and minimization are the same as described in Section 28.5.4.2 for the Southern Freeway Alternative.

Avoidance Alternatives for the Draper Irrigation Canal and 15400 S. Pony Express Road

Along the Porter Rockwell Boulevard alignment in the proximity of the Draper Irrigation Canal and the historic property there are two planned developments:

the Independence development and a commercial development. According to the Bluffdale City Engineer, the Independence development has not yet been approved by the City, but approval is expected soon (as of August 2007). The other commercial development has been approved and is platted. Both developments are shown in Figure 28-32, Avoidance Alternative for Properties along Porter Rockwell.

The Draper Irrigation Canal and the historic property at 15400 S. Pony Express Road, which consists of six contributing outbuildings (the house is not considered eligible), would be affected by the proposed Porter Rockwell Boulevard. This alternative has been designed in coordination with both developers to minimize the impacts to their plans.

An avoidance alternative was developed for these two historic properties. The avoidance alternative included an eastern alignment shift in the location of the historic property at 15400 S. Pony Express Road. This avoidance alternative would use less than 300 feet of the undisturbed Draper Irrigation Canal and one of the six historic outbuildings. However, this avoidance alternative would affect four of the eight commercial properties from the platted development. The proposed Porter Rockwell Boulevard alternative would not affect any of the commercial properties.

Alignment Shifts for 1020 W. State Street and 1060 W. State Street in Lehi

The avoidance alternative for the Arterials Alternative for these two historic houses is the same as that discussed in Section 28.5.4.3 for the 2100 North Freeway Alternative.

28.5.5 Prudence of the Southern Freeway and Arterials Alternatives

Both the Southern Freeway and Arterials Alternatives would cause more overall harm to the natural and built environments than would the 2100 North Freeway Alternative.

28.5.5.1 Comparison of Harm to Section 4(f) Resources

In terms of the impacts from the Utah County alternatives on Section 4(f) resources, the 2100 North Freeway Alternative uses four historic resources, the Southern Freeway Alternative uses three Section 4(f) resources (two historic resources and one park), and the Arterials Alternative uses five historic resources. Table 28.5-5 below summarizes the Section 4(f) uses for the Utah County alternatives.

Table 28.5-5. Total Number of Section 4(f) Uses from the Utah County Alternatives

Section 4(f) Use	Alternative		
	Southern Freeway	2100 North Freeway	Arterials
Direct use; <i>de minimis</i>	6	8	16
Direct use; not <i>de minimis</i>	3	4	5

The qualitative impacts were considered for each alternative. Chapter 17, Historic, Archaeological, and Paleontological Resources, describes the different SHPO ratings.

- SHPO A-rated historic buildings are those that retain integrity; are an excellent example of a style or type; are unaltered or have only minor alterations or additions; or are individually eligible for the NRHP under Criterion C.
- A SHPO B-rated historic building was built within the historic period and retains integrity; is a good example or a style or type, but is not as well-preserved or well-executed as A buildings; has more substantial alterations or additions than A buildings, though the overall integrity is retained; or is eligible for the NRHP as part of a potential historic district or primarily for historical, rather than architectural, reasons.

The historic properties affected by the alternatives are SHPO B-rated buildings; there are no A-rated buildings used in Utah County.

28.5.5.2 Overall Comparison

This section provides an overall comparison of the Utah County alternatives. Table 28.5-6 below summarizes the impacts to resources in Utah County by alternative.

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Table 28.5-6. Comparison of Environmental Impacts from the Utah County Alternatives

Impact Category	Alternative		
	Southern Freeway	2100 North Freeway	Arterials
Section 4(f) uses (direct use; not <i>de minimis</i>)	3	4	5
Farmland impacts (prime farmlands)	149 acres	97 acres	125 acres
Relocations (business and residential)	127	32	67
Noise impacts	140	134	226
Wetland impacts (primary and secondary)	285 acres	37 acres	256 acres
Impacts to habitat for threatened and endangered species	1.5 acres	0	0.03 acre
Impacts to hazardous waste sites	4	2	6
Table summarized from Table 2.4-9, Environmental Impacts from the Utah County Alternatives.			

As shown in Table 28.5-6, the Southern Freeway Alternative has the fewest Section 4(f) uses compared to the other two alternatives. However, when comparing all environmental resources and issues, the 2100 North Freeway Alternative has the fewest impacts, especially to wetland areas. In addition, unlike the other two action alternatives in Utah County, the 2100 North Freeway Alternative would not affect any habitat for threatened and endangered species. The 2100 North Freeway Alternative would have fewer noise impacts, relocations, farmland impacts, and impacts to hazardous waste sites. For these reasons, the Southern Freeway Alternative and Arterials Alternative are not considered prudent; their impacts are much greater than those from the 2100 North Freeway Alternative.

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28.6 Measures To Minimize Harm

Although there are no prudent and feasible alternatives that would avoid all Section 4(f) resources, measures to avoid or minimize impacts to individual resources were considered and incorporated into the MVC project. This reduced the overall number of adverse impacts identified in previous sections of this chapter. The following sections describe the measures that were considered to minimize harm to individual Section 4(f) resources that would be affected by the project.

28.6.1 Measures To Minimize Harm to Historic Resources for All Alternatives in Salt Lake and Utah Counties

For linear historic resources (such as canals and railroad tracks), bridges or culverts would be used to span them. All of the linear historic resources would have a *de minimis* Section 4(f) use except the Provo Reservoir Canal in Bluffdale (all Utah County alternatives) and the Draper Irrigation Canal (Arterials Alternative in Utah County).

28.6.1.1 Programmatic Agreement or Memorandum of Agreement for Historic Resources

At this time, mitigation measures have not been developed for the adversely affected historic resources. Any mitigation measures would result from a Programmatic Agreement or Memorandum of Agreement that would be negotiated with the SHPO as part of the Record of Decision for the project.

A Programmatic Agreement or Memorandum of Agreement will be executed between FHWA, UDOT, and the SHPO. The Programmatic Agreement or Memorandum of Agreement will stipulate how the adverse impacts to historic properties will be resolved prior to construction of the MVC. The Programmatic Agreement or Memorandum of Agreement includes the documentation of the historic resources adversely affected through the completion of an Intensive-Level Survey. An Intensive-Level Survey will be completed for the four historic properties adversely affected. The Intensive-Level Survey includes the following elements:

- Photographs that show such attributes as the interior, exterior, and streetscape. This will include an adequate number of professional-quality, black-and-white photographs.
- Research material including a copy and a negative of the legal historic tax card (if available).
- Repository of all materials with the Division of State History, Historic Preservation Office, to be placed on file.

28.6.2 Measures To Minimize Harm to Parks and Recreation Areas in Salt Lake County for All Alternatives

The publicly owned parks and recreation areas that are used by alternatives in Salt Lake County are the Lee Kay Center for Hunter Education, Centennial Park, Hunter Park, the Hunter High School athletic fields, and the Hillside Elementary School athletic fields. The measures to minimize harm to these facilities are discussed below.

28.6.2.1 Lee Kay Center for Hunter Education

The Lee Kay Center for Hunter Education would be affected by all of the Salt Lake County alternatives. The transit alternative would affect between 1.2 acres and 3.0 acres on the east side of the Center's property (see Table 28.4-6 above, Description of Uses of Public Parks and Recreation Areas from the 5600 West Transit Alternative). None of the amenities found at the Lee Kay Center for Hunter Education would be affected by the transit alternative.

The 5800 West Freeway Alternative would use about 71 acres of the open area (see Table 28.4-8 above, Description of Uses of Public Parks and Recreation Areas from the Salt Lake County Freeway Alternatives). This alternative would use retaining walls to minimize impacts to wetland areas and to reduce the overall impact to the Center. A retaining wall would be used to avoid affecting any of the structures and facilities at this recreation area. The area that would be affected, which is shown in Figure 28-20, Impacts to Lee Kay Center for Hunter Education, is an open field along the eastern border that is occasionally used for dog-trial training. The primary dog-trial training area is located in the middle of the Center and would not be affected by the Mountain View Corridor. The entrance into the facility would be relocated by the 5800 West Freeway Alternative.

The 7200 West Freeway Alternative would use about 1.6 acres on the northwest corner of the Center. This alternative would use a retaining wall to minimize the harm to the Lee Kay Center for Hunter Education. This wall would minimize impacts to wetlands and the amount of right-of-way required from the Center. A retaining wall at this location would require about 25 linear feet of right-of-way; without a retaining wall, about 50 linear feet would be required.

Mitigation for Lee Kay Center for Hunter Education

FHWA and UDOT are currently evaluating possible mitigation measures with the Utah Division of Wildlife Resources. FHWA and UDOT will continue to coordinate with the officials at the Division throughout the environmental and design phases of this project.

28.6.2.2 Centennial Park

Both of the transit options would use between 0.1 acre and 0.3 acre along the western edge of Centennial Park (see Table 28.4-6 above). This park would not be affected by the freeway alternatives. None of the amenities located at this facility would be removed or affected.

28.6.2.3 Hunter Park

The 5800 West Freeway Alternative is the only alternative that would affect Hunter Park. This alternative would require about 4.7 acres along the eastern border of the park (see Table 28.4-8 above). A retaining wall would be used along the park's eastern boundary to minimize the overall impact resulting from the 5800 West Freeway Alternative. None of the park's amenities would be used.

28.6.2.4 Hunter High School Athletic Fields

The 5800 West Freeway Alternative is the only alternative that would affect the Hunter High School athletic fields. This alternative would use about 0.4 acre as shown in Table 28.4-8 above. In discussion with the officials at Granite School District, the use would not alter the functionality of either the softball diamond or the soccer field. A retaining wall would be used to minimize the use at this location.

28.6.2.5 Hillside Elementary School Athletic Fields

The 5800 West Freeway Alternative is the only alternative that would affect the Hillside Elementary School athletic fields. This alternative would use about 2.2 acres of these athletic fields (see Table 28.4-8 above). A retaining wall would be used to minimize the use at this location. Possible mitigation includes providing an athletic field directly to the north of the existing field. This possible location is adjacent to the existing field. FHWA and UDOT will continue to coordinate with school officials and the Granite School District regarding the impacts and mitigation.

28.6.3 Measures To Minimize Harm to Parks and Recreation Areas in Utah County for All Alternatives

This section discusses measures to minimize harm to the parks and recreation areas that would be affected by the alternatives in Utah County. The affected or used facilities are the Jordan River Parkway Trail (crossed by all three alternatives) and Northlake Park in Lehi.

28.6.3.1 Jordan River Parkway Trail

The Jordan River Parkway Trail would be spanned by all three of the alternatives in Utah County (the Porter Rockwell Boulevard arterial spans a planned section of the parkway). This parkway extends from Utah Lake into Salt Lake County along the Jordan River. The alternatives in Utah County would not affect the amenities or qualities of the Jordan River Parkway Trail. For the 2100 North Freeway and Arterials Alternatives (at 2100 North), the Jordan River Parkway Trail would cross over these roads. A new bridge would be built on the parkway to ensure the continuity of the trail system. The bridge over 2100 North would be constructed to meet the requirements and standards of the Americans with Disabilities Act. At 1900 South, for both the freeway and arterials alternatives, the Jordan River Parkway Trail could be rerouted to cross at the new bridge over the Jordan River. The bridge would be designed and constructed so that the parkway could be located underneath it. The continuity and function of the Jordan River Parkway Trail would not be altered or affected by the Mountain View Corridor.

In coordination with Utah County Public Works, ramps would be designed and constructed to minimize the number of switchbacks at 2100 North. The ramps would be constructed along the trail and would gradually rise to cross over the new 2100 North roadway (under either the freeway or arterials alternatives).

28.6.3.2 Northlake Park

The Southern Freeway Alternative would affect this park. To provide access into the subdivision west of the park, an access road through Northlake Park would be constructed. None of the park's amenities would be affected.

28.7 Coordination

28.7.1 Coordination Efforts for Historic Resources

The following is a summary from Chapter 17, Historic, Archaeological, and Paleontological Resources.

As part of the effort to identify Section 4(f) resources in the impact analysis area, Section 106 consultation was carried out among UDOT, UTA, FHWA, FTA, and several other agencies and individuals. Among those agencies consulted were the Utah SHPO, the Utah Geological Survey, the Bureau of Land Management (Salt Lake Field Office), and the Utah National Guard at Camp Williams.

In addition to the agencies, consultation was undertaken with several other entities that included certified local governments (CLG), historical societies and organizations, and mayors or town councils where no CLG or historical society exists. The following groups were contacted by a written letter:

- American Fork CLG, Mrs. Juel Belmont
- Bluffdale CLG, Mr. Denny Neilson and Mrs. Gloria Neilson
- Herriman, Mayor J. Lynn Crane
- Lehi CLG, Mr. John Rockwell
- Magna Township, Town Council
- Riverton Historical Society, Mrs. Karen Bashore
- Salt Lake City CLG, Ms. Elizabeth Giraud
- Salt Lake County CLG, Mr. Clair Hardman
- South Jordan History Committee, Mr. Joey Clegg
- Utah County CLG, Mrs. Donna Breckenridge
- Utah Heritage Foundation, Mr. Kirk Huffaker
- West Jordan, Mayor Bryan Holladay
- West Valley City, Mayor Dennis Nordfelt

The following six Native American tribes with patrimonial claims over the general project area were also consulted:

- Confederated Tribes of Goshute Reservation
- Northwestern Band of Shoshone Nation
- Paiute Tribe of Utah
- Shoshone-Bannock Tribes
- Skull Valley Band of Goshute Indians
- Uintah and Ouray Ute Indian Tribe

Consultation with the SHPO, the Utah Geological Survey, mayors, and tribes focused on soliciting information about the known or potential presence of both

historic/archaeological and paleontological resources in the areas that could be directly or indirectly affected by the proposed alternatives. Consultation between UDOT and FHWA and the Utah SHPO focused on defining the appropriate Area of Potential Effects (APE) and on methods for identifying resources that would be appropriate for this EIS.

None of the agencies, mayors, CLG representatives, or tribes identified any specific cultural or paleontological resources of concern in the impact analysis area. Several of the tribes requested copies of the technical reports produced for this EIS and have asked to remain informed of the project's progress and any discoveries of prehistoric resources or human remains during construction.

In addition, several individuals and nonpolitical, community-based organizations were contacted for information about resources in the impact analysis area. These efforts were intended to help identify resources that are important to individual communities. These individuals and organizations included the newly created Magna Historical Society as well as city planners and city engineers with both Magna Township and West Valley City (which does not have a formal historical society). None of the individuals and organizations contacted identified any important historic sites or potential conflicts.

28.7.2 Coordination Efforts for Parks and Recreation Areas

UDOT and FHWA have been coordinating with the appropriate jurisdictional agencies regarding parks and recreation areas in the MVC study area.

Coordination has included meetings with the following agencies:

- Utah Division of Wildlife Resources (Lee Kay Center for Hunter Education)
- West Valley City (Centennial Park and West Ridge Golf Course)
- Salt Lake County Parks and Recreation (Hunter Park, Western Springs Park, planned section of the Jordan River Parkway in Bluffdale)
- Granite School District (Hillside Elementary School and Hunter High School athletic fields)
- Jordan School District
- Alpine School District
- Riverton City (Western Springs Park)
- Lehi City (Pointe Meadow Park and Northlake Park)
- Utah County (Jordan River Parkway Trail)
- Utah Division of Parks and Recreation (Section 6(f) properties)

Coordination efforts are ongoing and will continue through the Final EIS process.

28.8 References

[FHWA] Federal Highway Administration

- 2005a Guidance for Determining *De Minimis* Impacts to Section 4(f) Resources. December 13.
- 2005b Section 4(f) Policy Paper. March 1.

HDR Engineering, Inc.

- 2007 Alternatives Screening Report Addendum. October.

[LDS Church] Church of Jesus Christ of Latter-day Saints

- 2006 Welfare Services Fact Sheet – 2006. www.providentliving.org/welfare/pdf/2006WelfareFactSheet.pdf.

Parsons Brinckerhoff

- 2004 Alternatives Screening Report. July.
- 2005 SR 111 Elimination Report. Technical Report 06-4. July 14.

Transportation Research Board

- 2000 Highway Capacity Manual.

[UDOT] Utah Department of Transportation

- 2004 Selective Reconnaissance Survey, West Valley City and Magna, Salt Lake County, Utah.
- 2005a Environmental Study, Redwood Road 10400 South to Bangerter Highway, SP-0068(24)43. Approved by UDOT in March 2005.
- 2005b Environmental Study, Redwood Road, 2100 South to 3500 South. STP-0068(15)55. Approved by UDOT and FHWA in March 2005.
- 2007 Environmental Assessment, SR 68, Bangerter Highway through Saratoga Springs. HPP-TI-STP-0068(42)26. Decision document pending.

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